

**CI C0080150**

**TUC1 HP Turbine Refurbishment**

**REDACTED**

**May 4, 2026**



**NSEB APPROVAL SHEET**

**Project Title:** TUC1 HP Turbine Refurbishment

**CI Number:** C0080150

**Date:** May 4, 2026

| Expenditure Profile |               |                  | Type of Filing                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------|---------------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Year                | Budget Amount | Project Estimate | <input type="checkbox"/> Capital Project Authorization<br><input checked="" type="checkbox"/> Unforeseen and Unbudgeted (U&U)<br><input type="checkbox"/> Planned & Advanced (P&A)<br><input type="checkbox"/> Subsequent Approval Item<br><br><input type="checkbox"/> Authorization to Overspend (ATO)<br><input type="checkbox"/> Scope Change<br><input type="checkbox"/> Final Cost (FIN) |
| 2025                |               | 2,313,989        |                                                                                                                                                                                                                                                                                                                                                                                                |
| 2026                |               | 213,617          |                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Total</b>        | \$0           | \$2,527,606      |                                                                                                                                                                                                                                                                                                                                                                                                |

**COMMENTS**

Submitted on behalf of NOVA SCOTIA POWER INCORPORATED

Approved on behalf of NOVA SCOTIA ENERGY BOARD

Authorized Signatory  
Dave Pickles  
Chief Operating Officer

DATE  
May 4, 2026

DATE

**CI Number: C0080150**

**Title: TUC1 HP Turbine Refurbishment**

**Start Date:** 2025/09  
**In-Service Date:** 2025/12  
**Final Cost Date:** 2026/10  
**Function:** Steam  
**Forecast Amount:** \$2,527,606

**DESCRIPTION:**

This project is for the detailed inspection and refurbishment of the Tufts Cove Unit 1 (TUC1) High Pressure (HP) turbine components, including the rotor, diaphragms, glands and bearings, to eliminate turbine vibration and to restore the stable operation across the unit's operating range.

TUC1 had been experiencing elevated transient vibration during load swings and under varying operating conditions, posing a risk of unit trips and unavailability. To investigate the cause and gather detailed condition data, the High-pressure (HP) turbine was fully disassembled and subjected to detailed inspection (please refer to Partially Confidential Attachment 1). As a result of assessment, the rotor was removed and refurbished. The rotor refurbishment included grit blasting, dynamically balancing, and testing to correct contributing mechanical issues. Following reassembly and return to service, post-work verification confirmed that turbine vibration was eliminated, restoring stable operation across the unit's operating range.

**Summary of Related CIs +/- 2 years:**

Pursuant to Section 11.2 of the Detailed CEJC, related CIs for steam projects include "work completed on the same asset (turbine, boiler, etc.) and on the same unit (TUC #1, for example)."

**Depreciation Class:** Steam Production Plant – Tufts Cove 1

**Retirement Information:**

- Categorization of Retirement: Accounting Policy 6420 - Retirement and Disposal of Capital Assets
- Percentage of Asset Pool: 2.85%

**Estimated Life of the Asset:** 8 Years

**JUSTIFICATION:**

**Justification Criteria:** Thermal

**Sub Criteria:** Equipment Refurbishment

**Why do this project?**

The TUC1 HP Turbine had been experiencing transient elevated vibrations periodically during load swings and under varying operating conditions, posing a risk of unit trips and unavailability. Elevated vibration posed a risk of forced outages, derating, or unit trips, and reduced equipment life, directly impacting unit reliability, availability, and safety. Remediating the issue ensured stable operation, protected critical turbine components, and reduced the risk of unplanned downtime.

**Why do this project now?**

The project was undertaken due to the ongoing and unpredictable nature of the vibration events and their increasing risk of impacting unit availability. Continued operation without corrective action heightened the likelihood of a forced derate or trip during critical operating periods. Addressing the issue proactively during a planned shutdown minimized these risks and avoided potential secondary damage. TUC1 had a previously planned extended maintenance outage that provided an opportunity to include the inspection of the HP turbine and remediate the vibration issues.

This project was deemed to be in-service when reassembly, return to service, and post-work verification confirmed that TUC1 turbine vibration issues were eliminated (December 2025). The Final Cost Date (October 2026) is listed as six months after final project activities were completed (April 2026).

**Why do this project this way?**

A full HP turbine disassembly, inspection, rotor cleaning, alignment, and balancing were required to identify, assess, and eliminate the cause of the vibration. Partial or non-intrusive measures would not have provided sufficient assurance of long-term reliability. This approach ensured the turbine was returned to service in a reliable condition.

**Contingency Statement**

This project is complete; as such, no contingency has been included in the detailed cost estimate.

**Execution Year:** 2025

| Description                             | Unit | Quantity | Unit Estimate | Total Estimate | Cost Support Reference | Completed Similar Projects (FP#'s) |
|-----------------------------------------|------|----------|---------------|----------------|------------------------|------------------------------------|
| <b>Regular Labour</b>                   |      |          |               |                |                        |                                    |
| Engineering                             | PD   | 24       | \$ 457        | \$ 10,872      |                        |                                    |
| Maintenance Trades                      | PD   | 120      | \$ 411        | \$ 49,271      |                        |                                    |
| Power Engineer                          | PD   | 5        | \$ 439        | \$ 2,196       |                        |                                    |
| Utilityworker                           | PD   | 25       | \$ 286        | \$ 7,150       |                        |                                    |
| Sub-Total                               |      |          |               | \$ 69,489      |                        |                                    |
| <b>OT Labour</b>                        |      |          |               |                |                        |                                    |
| Maintenance Trades                      | PD   | 75       | \$ 821        | \$ 61,960      |                        |                                    |
| Power Engineer                          | PD   | 5        | \$ 878        | \$ 4,392       |                        |                                    |
| Utilityworker                           | PD   | 25       | \$ 572        | \$ 14,299      |                        |                                    |
| Sub-Total                               |      |          |               | \$ 80,652      |                        |                                    |
| <b>Term Labour</b>                      |      |          |               |                |                        |                                    |
| Maintenance Trades                      | PD   | 58       | \$ 411        | \$ 23,797      |                        |                                    |
| Sub-Total                               |      |          |               | \$ 23,797      |                        |                                    |
| <b>Overtime Term Labour</b>             |      |          |               |                |                        |                                    |
| Maintenance Trades                      | PD   | 32       | \$ 821        | \$ 26,376      |                        |                                    |
| Sub-Total                               |      |          |               | \$ 26,376      |                        |                                    |
| <b>Materials</b>                        |      |          |               |                |                        |                                    |
| Vibration Damping Mounts                | lot  | 1        | \$ 616        | \$ 616         |                        |                                    |
| Turbine Rotor Turning Rolls             | lot  | 1        |               |                |                        |                                    |
| Hardwood                                | lot  | 1        | \$ 1,601      | \$ 1,601       |                        |                                    |
| Machining Services & Fabricate Hardware | lot  | 1        | \$ 13,841     | \$ 13,841      |                        |                                    |
| Pump Lubricator & Lube Oil              | lot  | 1        | \$ 6,047      | \$ 6,047       |                        |                                    |
| Sub-Total                               |      |          |               |                |                        |                                    |
| <b>Contracts</b>                        |      |          |               |                |                        |                                    |
| Technical Field Advisor                 | lot  | 1        |               |                | Attachment 2           |                                    |
| Non-Destructive Examination             | lot  | 1        | \$ 186,551    | \$ 186,551     |                        |                                    |
| Sand Blasting                           | lot  | 1        | \$ 31,757     | \$ 31,757      |                        |                                    |
| Night Shift Craft                       | lot  | 1        |               |                | Attachment 3           |                                    |
| Borescope                               | lot  | 1        | \$ 3,451      | \$ 3,451       |                        |                                    |
| Crane                                   | lot  | 1        | \$ 1,215      | \$ 1,215       |                        |                                    |
| Bolt Heating                            | lot  | 1        | \$ 114,538    | \$ 114,538     |                        |                                    |
| Night Shift Supervisor                  | lot  | 1        | \$ 67,613     | \$ 67,613      |                        |                                    |
| Scaffolding                             | lot  | 1        | \$ 14,670     | \$ 14,670      |                        |                                    |
| Sub-Total                               |      |          |               |                |                        |                                    |
| <b>Consulting</b>                       |      |          |               |                |                        |                                    |
| Metallugic Analysis                     | lot  | 1        | \$ 20,700     | \$ 20,700      |                        |                                    |
| Sub-Total                               |      |          |               | \$ 20,700      |                        |                                    |
| <b>Overtime Meals</b>                   |      |          |               |                |                        |                                    |
| Overtime Meals                          | lot  | 1        | \$ 3,756      | \$ 3,756       |                        |                                    |
| Sub-Total                               |      |          |               | \$ 3,756       |                        |                                    |
| <b>Interest Capitalized</b>             |      |          |               |                |                        |                                    |
| AFUDC                                   |      |          |               | \$ 8,109       |                        |                                    |
| Sub-Total                               |      |          |               | \$ 8,109       |                        |                                    |
| <b>Administrative Overhead</b>          |      |          |               |                |                        |                                    |
| Labour AO                               |      |          |               | \$ 55,117      |                        |                                    |
| Contractor AO                           |      |          |               | \$ 245,366     |                        |                                    |
| Sub-Total                               |      |          |               | \$ 300,483     |                        |                                    |
| <b>SUB-TOTAL (no AO, AFUDC)</b>         |      |          |               | \$ 2,219,014   |                        |                                    |
| <b>TOTAL (AO, AFUDC included)</b>       |      |          |               | \$ 2,527,606   |                        |                                    |
| <b>Original Cost</b>                    |      |          |               | \$ 1,835,142   |                        |                                    |

Note 1: The labour figures noted above are an average of salaries across a variety of jobs within similar classifications including fringe, and are used solely for budgeting purposes.

Note 2: Small differences in totals are attributable to rounding.



Instructions: Select option in Column B.  
Columns C through G will auto-populate.

Document No: XXX-XX-XXXX-XXXX

| Project Cost Estimate Input Checklist and Maturity Matrix                    |                        |                         |         |         |         |         |
|------------------------------------------------------------------------------|------------------------|-------------------------|---------|---------|---------|---------|
| Process Industries                                                           | Required fields:       | Estimate Classification |         |         |         |         |
| Project Name: TUC1 HP Turbine Refurbishment                                  | Started or Preliminary | Class 5                 | Class 4 | Class 3 | Class 2 | Class 1 |
| Maturity Level of Project Definition Deliverables                            | Defined or Complete    |                         |         |         |         |         |
| General Project Data                                                         |                        |                         |         |         |         |         |
| A. Scope                                                                     |                        |                         |         |         |         |         |
| Non-Process Facilities (Infrastructure, Ports, Pipeline, Power Transmission) | Not Applicable (NA)    |                         |         |         |         |         |
| Project Scope of Work Description                                            | Defined (D)            | P                       | P       | D       | D       | D       |
| Byproduct and Waste Disposal                                                 | Not Applicable (NA)    | NR                      |         |         |         |         |
| Site Infrastructure (Access, Construction Power, Camp, etc.)                 | Not Applicable (NA)    | NR                      |         |         |         |         |
| B. Capacity                                                                  |                        |                         |         |         |         |         |
| Plant Production/Facility (includes power facilities)                        | Not Applicable (NA)    |                         |         |         |         |         |
| Electrical Power Requirements (when not the primary capacity driver)         | Not Applicable (NA)    | NR                      |         |         |         |         |
| C. Project Location                                                          |                        |                         |         |         |         |         |
| Plant and Associated Facilities                                              | Defined (D)            | P                       | P       | D       | D       | D       |
| D. Requirements                                                              |                        |                         |         |         |         |         |
| Codes and/or Standards                                                       | Defined (D)            | NR                      | P       | D       | D       | D       |
| Communication Systems                                                        | Not Applicable (NA)    | NR                      |         |         |         |         |
| Fire Protection and Life Safety                                              | Not Applicable (NA)    | NR                      |         |         |         |         |
| Environmental Monitoring                                                     | Not Applicable (NA)    | NR                      | NR      |         |         |         |
| E. Technology Selection                                                      |                        |                         |         |         |         |         |
| Process Technology                                                           | Not Applicable (NA)    |                         |         |         |         |         |
| F. Strategy                                                                  |                        |                         |         |         |         |         |
| Contracting/Sourcing                                                         | Defined (D)            | NR                      | P       | D       | D       | D       |
| Escalation                                                                   | Not Applicable (NA)    | NR                      |         |         |         |         |
| G. Planning                                                                  |                        |                         |         |         |         |         |
| Logistics Plan                                                               | Not Applicable (NA)    |                         |         |         |         |         |
| Integrated Project Plan                                                      | Not Applicable (NA)    | NR                      |         |         |         |         |
| Project Code of Accounts                                                     | Not Applicable (NA)    | NR                      |         |         |         |         |
| Project Schedule                                                             | Defined (D)            | NR                      | P       | D       | D       | D       |
| Regulatory Approval & Permitting                                             | Not Applicable (NA)    | NR                      |         |         |         |         |
| Risk Register                                                                | Not Applicable (NA)    | NR                      |         |         |         |         |
| Stakeholder Consultation/Engagement/Management Plan                          | Not Applicable (NA)    | NR                      |         |         |         |         |
| Work Breakdown Structure (WBS)                                               | Not Applicable (NA)    | NR                      |         |         |         |         |
| Start-up & Commissioning Plan                                                | Defined (D)            | NR                      | P       | P/D     | D       | D       |
| H. Studies                                                                   |                        |                         |         |         |         |         |
| Environmental Impact/Sustainability Assessment                               | Not Applicable (NA)    | NR                      |         |         |         |         |
| Environment/Existing Conditions                                              | Not Applicable (NA)    | NR                      |         |         |         |         |
| Soils & Hydrology                                                            | Not Applicable (NA)    | NR                      |         |         |         |         |
| Technical Deliverables (Specifications and/or Drawings)                      |                        |                         |         |         |         |         |
| Block Flow Diagrams                                                          | Not Applicable (NA)    |                         |         |         |         |         |
| Equipment Data Sheets                                                        | Complete (C)           | NR/S                    | P       | C       | C       | C       |
| Equipment Lists: Electrical                                                  | Not Applicable (NA)    | NR/S                    |         |         |         |         |
| Equipment Lists: Process/Utility/Mechanical                                  | Complete (C)           | NR/S                    | P       | C       | C       | C       |
| Heat & Material Balances                                                     | Not Applicable (NA)    | NR                      |         |         |         |         |
| Process Flow Diagrams (PFDs)                                                 | Not Applicable (NA)    | NR                      |         |         |         |         |
| Utility Flow Diagrams (UFDs)                                                 | Not Applicable (NA)    | NR                      |         |         |         |         |
| Design Specifications                                                        | Complete (C)           | NR                      | S/P     | C       | C       | C       |
| Electrical One-Line Drawings                                                 | Not Applicable (NA)    | NR                      |         |         |         |         |
| General Equipment Arrangement Drawings                                       | Not Applicable (NA)    | NR                      |         |         |         |         |
| Instrument List                                                              | Not Applicable (NA)    | NR                      |         |         |         |         |
| Piping & Instrumentation Diagrams                                            | Complete (C)           | NR                      | S/P     | C       | C       | C       |
| Plot Plans/Facility Layouts                                                  | Complete (C)           | NR                      | S/P     | C       | C       | C       |
| Construction Permits                                                         | Not Applicable (NA)    | NR                      |         |         |         |         |
| Civil/Site/Structural/Architectural Discipline Drawings                      | Not Applicable (NA)    | NR                      |         |         |         |         |
| Demolition Plans and Drawings                                                | Not Applicable (NA)    | NR                      |         |         |         |         |
| Erosion Control Plan & Drawings                                              | Not Applicable (NA)    | NR                      |         |         |         |         |
| Fire Protection & Life Safety Drawings & Details                             | Not Applicable (NA)    | NR                      |         |         |         |         |
| Electrical Schedules                                                         | Not Applicable (NA)    | NR                      | NR/S    |         |         |         |
| Instrument & Control Schedules                                               | Not Applicable (NA)    | NR                      | NR/S    |         |         |         |
| Instrument Data Sheets                                                       | Not Applicable (NA)    | NR                      | NR/S    |         |         |         |
| Piping Schedules                                                             | Not Applicable (NA)    | NR                      | NR/S    |         |         |         |
| Piping Discipline Drawings                                                   | Not Applicable (NA)    | NR                      | NR/S    |         |         |         |
| Spare Parts Listings                                                         | Preliminary (P)        | NR                      | NR      | P       | P/C     |         |
| Electrical Discipline Drawings                                               | Not Applicable (NA)    | NR                      | NR      |         |         |         |
| Facility Emergency Communication Plan & Drawings                             | Not Applicable (NA)    | NR                      | NR      |         |         |         |
| Information Systems/Telecommunication Drawings                               | Not Applicable (NA)    | NR                      | NR      |         |         |         |
| Instrumentation/Control System Discipline Drawings                           | Not Applicable (NA)    | NR                      | NR      |         |         |         |
| Mechanical Discipline Drawings                                               | Not Applicable (NA)    | NR                      | NR      |         |         |         |
| Total # Deliverables for this Project                                        |                        | 2                       | 11      | 12      | 12      | 11      |
| % Defined/Complete towards Class Estimate                                    |                        | 100%                    | 100%    | 100%    | 100%    | 100%    |

#### Comments:

This project is being filed as a Class 1 estimate. The defined deliverables for this project indicate that 100% of Class 1 deliverables have been completed.

#### Legend:

The maturity level is an approximation of the completion status of the deliverable. The completion is indicated by the following descriptors:

##### General Project Data:

- Not Required (NR): May not be required for all estimates of the specified class, but specific project estimates may require at least preliminary development.
- Preliminary (P): Project definition has begun and progressed to at least an intermediate level of completion. Review and approvals for its current status has occurred.
- Defined (D): Project definition is advanced, and reviews have been conducted. Development may be near completion with the exception of final approvals.

##### Technical Deliverables:

- Not Required (NR): Deliverable may not be required for all estimates of the specified class, but specific project estimates may require at least preliminary development.
- Started (S): Work on the deliverable has begun. Development is typically limited to sketches, rough outlines, or similar levels of early completion.
- Preliminary (P): Work on the deliverable is advanced. Interim, cross-functional reviews have usually been conducted. Development may be near completion except for final reviews and approvals.
- Complete (C): The deliverable has been reviewed and approved as appropriate.

#### Inclusions

For the purposes of this document, the term *process industries* is assumed to include firms involved with the manufacturing and production of chemicals, petrochemicals, and hydrocarbon processing. The common thread among these industries (for the purpose of estimate classification) is their reliance on process flow diagrams (PFDs), piping and instrument diagrams (P&IDs), and electrical one-line drawings as primary scope defining documents. These documents are key deliverables in determining the degree of project definition, and thus the extent and maturity of estimate input information. This RP applies to a variety of project delivery methods such as traditional design-bid-build (DBB), design-build (DB), construction management for fee (CM-fee), construction management at risk (CM-at risk), and private-public partnerships (PPP) contracting methods.

Estimates for process facilities center on mechanical and chemical process equipment, and they have significant amounts of piping, instrumentation, and process controls involved. As such, this recommended practice may apply to portions of other industries, such as pharmaceutical, utility, water treatment, metallurgical, converting, and similar industries.

Most plants also have significant electrical power equipment (e.g., transformers, switchgear, etc.) associated with them. As such, this RP also applies to electrical substation projects, either associated with the process plant, as part of power transmission or distribution infrastructure, or supporting the power needs of other facilities. This RP excludes power generating facilities and high-voltage transmission.



**NOVA SCOTIA POWER**

**TUFTS COVE**

**Unit Number: 1**

**Service Event: 2025-10-06 to 2025-12-15**

**Serial Number: 983914MA**

**Frame Type/Building Blocks: UNKNOWN-ST**

**Job Number: 0QCS25009A73**

**HP Major Inspection**

**Report Written By: Matthew Ryan**

**District Service Manager: Dan Fearn**

***CUSTOMER FINAL REPORT***

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1. Summary

1.1. Scope Summary

Siemens Energy provided technical field advisory services at Nova Scotia Power, Tufts Cove Unit 1 on a technical field assistance (TFA) basis for the inspection of the equipment as outlined in this report.

The original work scope was to be completed by Siemens Energy included the following:

- 1. HP major inspection
- 2. Main oil pump inspection
- 3. Replace valve heads for IP control valves

As the job progressed, the scope was reduced to exclude the main oil pump inspection. The customer decided they were satisfied with the alignment numbers recorded and decided not to open the main oil pump casing. Replacement of the valve heads for the IP control valves was removed from scope because the replacement valve heads did not arrive in time for the outage.

1.2. PCM Clarifications

| PCM Clarification | Description                   | Status | Status Date |
|-------------------|-------------------------------|--------|-------------|
| 1-25-016635       | Diaphragm Airfoil Deformities | Closed | 2025-12-15  |
| 1-25-017156       | Diaphragm Keyway Indications  | Closed | 2025-12-15  |
| 1-25-018826       | Future Diaphragm Adjustments  | Closed | 2025-12-16  |

1.3. Name Plate Rating

1.3.1. Unit Information

|                   |          |                  |             |
|-------------------|----------|------------------|-------------|
| Generator Serial: | 983914MK | Generator Frame: | UNKNOWN-GEN |
| HP Serial:        | 983914MA | HP Frame:        | UNKNOWN-ST  |

1.4. Outage Personnel

1.4.1. Customer Personnel

| Name           | Job Description      |
|----------------|----------------------|
| Banpreet Singh | Plant Engineer       |
| Leah Morrison  | Engineer in Training |

1.4.2. Siemens Energy Personnel

| Name       | Shift       | Job Description         | Scheduled Date In | Scheduled Date Out | Revised Date Out | Actual Date In | Actual Date Out |
|------------|-------------|-------------------------|-------------------|--------------------|------------------|----------------|-----------------|
| [REDACTED] | Day Shift   | Technical Field Advisor | 2025-10-03        | 2025-12-15         |                  | 2025-10-07     | 2025-12-15      |
| [REDACTED] | Night Shift | TFA/CLS                 | 2025-10-03        | 2025-12-15         | 2025-12-10       | 2025-10-06     | 2025-12-10      |
| [REDACTED] | Day Shift   | Balance Engineer        | 2025-11-02        | 2025-11-10         | 2025-11-12       | 2025-11-07     | 2025-11-12      |
| [REDACTED] | Day Shift   | Balance Engineer        | 2025-12-16        | 2025-12-19         | 2025-12-22       | 2025-12-16     | 2025-12-22      |

1.5. Work Description

The scope of work for this outage was to disassemble, clean, inspect and reassemble the HP turbine. Major milestones for the disassembly of this unit include: removal of the HP cylinders, removal of the HP rotor, removal of the diaphragms and removal of the bearings. Major milestones for the inspection phase of this unit include: visual inspection of the HP rotor and diaphragms, grit blasting and cleaning of the HP rotor and the diaphragms, NDE inspection of the HP rotor and diaphragms, NDE inspection of the bearings, slow speed balancing of the HP rotor and a borescope inspection of the HP rotor.

Major milestones for the reassembly of this unit include:

- Installation of the bearings and diaphragms
- Installation of the HP rotor
- Installation of the HP cylinders
- Installation of the HP steam inlet pipes

A number of components should be considered for replacement. Components in this category include:

- Inlet Gland Seals - Rows 17-25 due to wear and damage
- Exhaust Gland Seals - Rows 1-9 due to wear and damage
- Diaphragm Seals - All Rows due to wear and damage
- HP-IP Coupling Bolts - Coupling bolt holes are sloppy and should be honed and the bolts replaced
- HP-MOP Coupling Bolts - Due to wear on the threads

1.6. NDE Specialty Services

NDE services provided by third party through Nova Scotia Power.

1.7. Schedule Milestones

Milestones

| Milestone                                | Comments | Planned Date/<br>Time | Revised Date/<br>Time | Actual Date/Time | N/A |
|------------------------------------------|----------|-----------------------|-----------------------|------------------|-----|
| Mobilization and Demobilization          |          |                       |                       |                  |     |
| Mobilization *                           |          | 2025-10-06            |                       | 2025-10-06       |     |
| Demobilization *                         |          | 2025-12-16            |                       |                  |     |
| Other                                    |          |                       |                       |                  |     |
| Remove UH HP<br>Cylinders                |          | 2025-10-18            | 2025-10-16            | 2025-10-16       |     |
| Remove HP<br>Diaphragms                  |          | 2025-10-27            | 2025-10-24            | 2025-10-24       |     |
| Perform Low Speed<br>Balancing           |          | 2025-11-14            | 2025-11-12            | 2025-11-12       |     |
| HP Rotor Installed                       |          | 2025-11-21            | 2025-11-24            | 2025-11-24       |     |
| HP Ready for Turning<br>Gear             |          | 2025-12-04            | 2025-12-15            | 2025-12-15       |     |
| ST High Pressure (HP) Turbine Inspection |          |                       |                       |                  |     |
| HP Rotor Removed                         |          | 2025-10-24            | 2025-10-23            | 2025-10-23       |     |
| Offline/Online                           |          |                       |                       |                  |     |
| Unit Off Turning Gear                    |          | 2025-10-05            | 2025-10-09            | 2025-10-09       |     |

| Milestone            | Comments | Planned Date/Time | Revised Date/Time | Actual Date/Time | N/A |
|----------------------|----------|-------------------|-------------------|------------------|-----|
| Unit on Turning Gear |          | 2025-12-12        | 2025-12-20        | 2025-12-20       |     |
| Unit Online          |          | 2025-12-16        | 2025-12-21        | 2025-12-21       |     |

Work Force

Siemens Energy Limited provided technical field advisors required to complete the work scope. The work schedule was two 10-hour shifts per day, 6 days a week. This schedule was maintained throughout the outage. The shift schedule for the outage was 6 days per week consisting of 10-hour shifts, 2 shifts per day.

The outage Siemens Energy team consisted of the following, per shift:

1 x Technical Field Advisor

The outage labor for the work scope was provided by Nova Scotia Power.

Day shift crew - NS Power site millwrights

Night shift crew - Fundy millwrights contracted with NS Power

1.8. Related Job Numbers

Main Job Number for this Report

| Job Number   | Job Description             |
|--------------|-----------------------------|
| 0QCS25009A73 | CA-Tufts Cove 1 Report Only |

Additional Job Numbers for this Event

| Job Number   | Job Description      |
|--------------|----------------------|
| 0QCS25009A77 | FTS Start up support |
| 0QCS25009B73 | Tooling              |
| 0QCS25009B77 | Slow Speed Balance   |

2. Activities and Conclusions

2.1. HP Turbine - HP Outer Cylinder

Activity

Remove, clean, inspect and reinstall.

As Found

HP outer cylinder gaps were measured and recorded for bolted and unbolted conditions. Top leads were recorded.

Action Taken

HP paddle glands were removed, cleaned, inspected, measured and reinstalled; replaced paddle gland piping gaskets. HP expansion rings were removed, cleaned, NDE inspected and reinstalled. As Left bottom leads were recorded on the dummy glands. Half joint was cleaned and stoned and sealing compound was applied prior to setting the HP outer cylinder for final. Cover gaps were measured and recorded for As Left unbolted and bolted conditions.

**Recommendations**

There are no recommendations related to this activity.

**2.1.1 Photo Attachments**



**2.1.1.1 AF HP Outer Cylinder Lift**



**2.1.1.2 AL HP Outer Cylinder Lift**

**2.2. HP Turbine - HP Inner Cylinder**

**Activity**

Remove, clean, inspect and reinstall.

**As Found**

HP inner cylinder gaps were measured and recorded for bolted and unbolted conditions. Top and bottom leads were recorded on the diaphragms and glands, feeler gauges were used to record the side clearances.

**Action Taken**

Four dowels were fabricated for the inner cylinder as the originals were lost. Recorded HP inner cylinder distortion on the diaphragms using Metronor. As Left bottom leads were recorded on the diaphragms and glands. Half joint

was cleaned and stoned and sealing compound was applied prior to setting the HP inner cylinder for final. Cover gaps were measured and recorded for As Left unbolted and bolted conditions.

**Recommendations**

Replace damaged/worn seals. PCM recommended adjusting diaphragm radial clearances to bring them closer to design specification during the next available HP outage. Metronor distortion checks were conducted on the inner cylinder diaphragms, distortion was similar to when last recorded in 1999, recommend checking distortion again if any substantial difference between AL of previous outage and AF of current outage.

**2.2.1 Photo Attachments**



**2.2.1.1 AF HP Inner Cylinder Lift**



**2.2.1.2 AL HP Inner Cylinder Lift**

**2.3. HP Turbine - HP Gland Rings**

**Activity**

Remove, clean, inspect and reinstall.

**As Found**

As Found clearances were recorded, the vast majority were outside of tolerance. Gland seals were removed, cleaned and staged for inspection. Visual inspection of the gland seals revealed wear and damage on the seal fins, likely due to steam erosion and the age of the components.

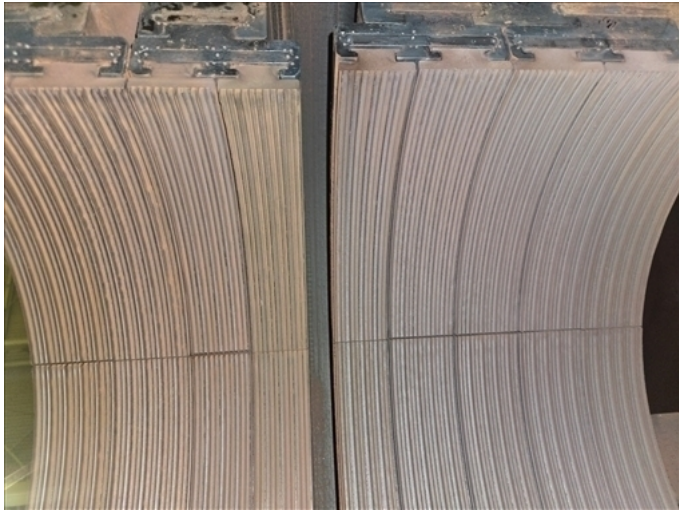
**Action Taken**

Gland seals were returned to service and the clearances were recorded, the glands with tight clearances were removed and edges were scraped to bring the clearances closer to design and reinstalled.

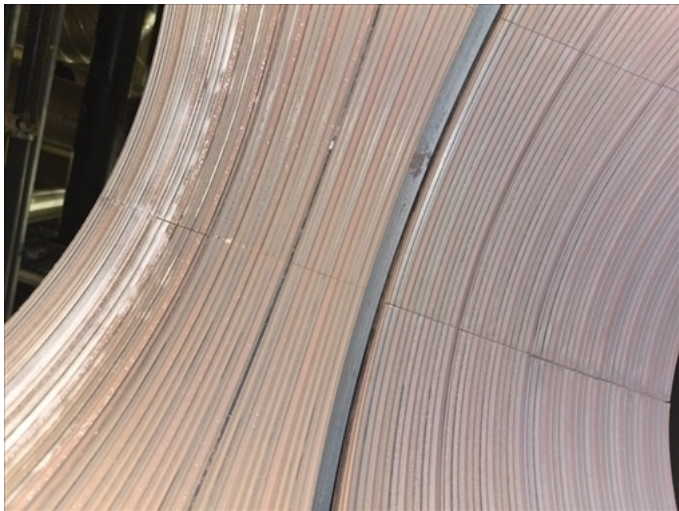
**Recommendations**

Replace damaged and worn down seals.

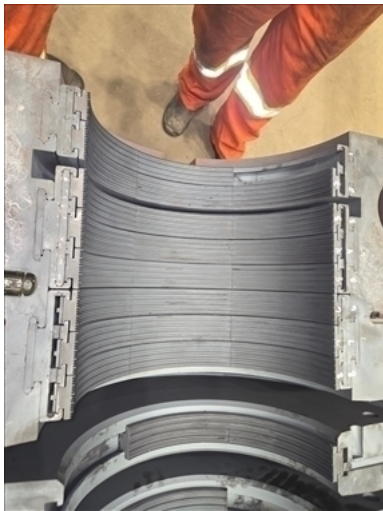
**2.3.1 Photo Attachments**



**2.3.1.1 AF Gland Seals**



**2.3.1.2 AF Gland Seals**



**2.3.1.3 AL Gland Seals**

**2.4. HP Turbine - Bearings**

**Activity**

Remove, clean, inspect and reinstall.

**As Found**

Visual inspections of the bearings were conducted and the bearings appear to be in acceptable condition. NDE inspection was conducted and no disbonding between the metals was observed.

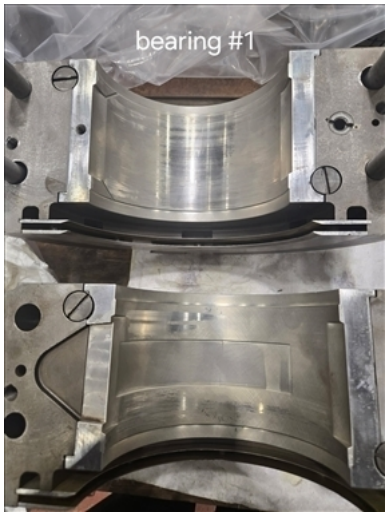
**Action Taken**

Bearings were cleaned and the dimensions were recorded. Bearings were returned to service, no shim adjustments.

**Recommendations**

There are no recommendations related to this activity.

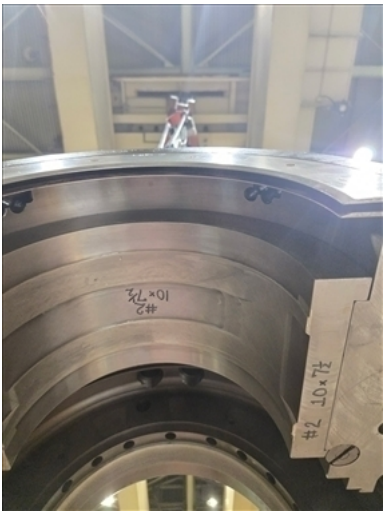
2.4.1 Photo Attachments



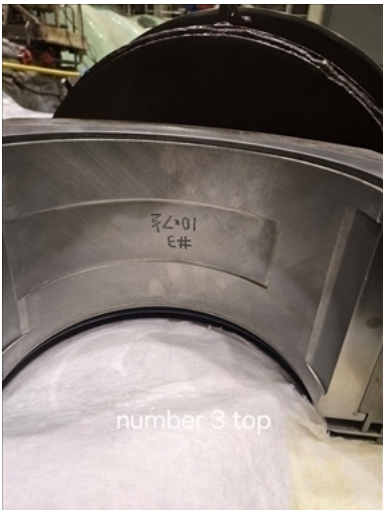
2.4.1.1 Bearing #1



2.4.1.2 Bearing #2 Lower Half



2.4.1.3 Bearing #2 Upper Half



2.4.1.4 Bearing #3 Upper Half



2.4.1.5 Bearing #2 Thrust Pads



**2.4.1.6 Bearing #2 Thrust Pads**

**2.5. HP Turbine - HP Rotor Shaft**

**Activity**

Remove, clean, inspect and reinstall.

**As Found**

Recorded HP-IP alignment and concentricity, recorded HP-MOP alignment and concentricity. HP rotor was removed from the unit, grit blasted, visually inspected, NDE inspected and a borescope inspection. Nothing of note discovered during the inspections.

**Action Taken**

HP rotor was installed in the slow speed balance machine and balanced. HP bore plug had to be removed for the borescope inspection, during removal of the plug the rotor bore was damaged slightly due to scraping, prior to installing the new bore plug the bore was reamed to remove the scraping damage, new bore plug was fabricated and installed. HP rotor was reinstalled, alignment and concentricity was recorded on the HP-IP and HP-MOP couplings.

**Recommendations**

Customer has replacement coupling bolts for the HP-IP, recommendation is to replace coupling bolts and hone the coupling bolt holes when available next. Coupling concentricity was brought as low as it could be but was still outside tolerance, customer accepted AL values.

2.5.1 Photo Attachments



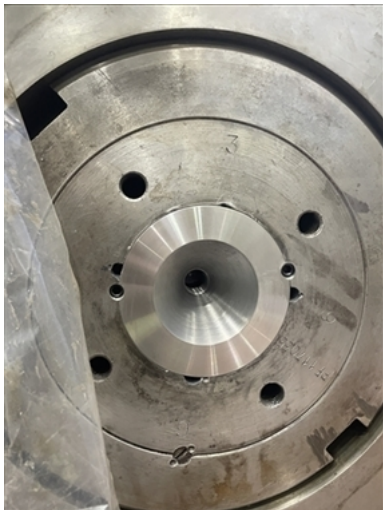
2.5.1.1 AF HP Rotor Lift



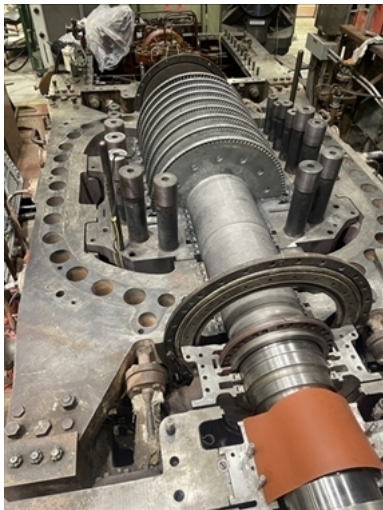
2.5.1.2 HP Rotor Balance Machine



2.5.1.3 AF HP Bore Damage



2.5.1.4 AL HP Bore Plug Installed



2.5.1.5 AL HP Rotor Installed

**2.6. HP Turbine - HP Diaphragm / Blade Ring**

**Activity**

Remove, clean, inspect and reinstall.

**As Found**

The diaphragms were inspected and the clearances were measured.

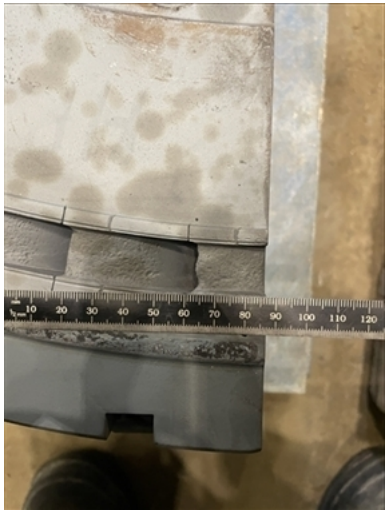
**Action Taken**

Diaphragms were removed, grit blasted and NDE inspected. The diaphragm airfoils were blended by a Siemens Energy blader to sharpen the blade edges as well as blend out the indications discovered during NDE inspections. Two indications were discovered in the bottom keyways of diaphragms 4 and 6. The keyway indications were blended by NS Power millwrights, the indication on diaphragm 6 was successfully blended, while diaphragm 4 when blended opened a void in the material. Customer decided to stop blending and return the diaphragms to service. Diaphragm bores were recorded off two long seals for reference. As left clearances were recorded with bottom lead checks and feeler gauges recording side clearances.

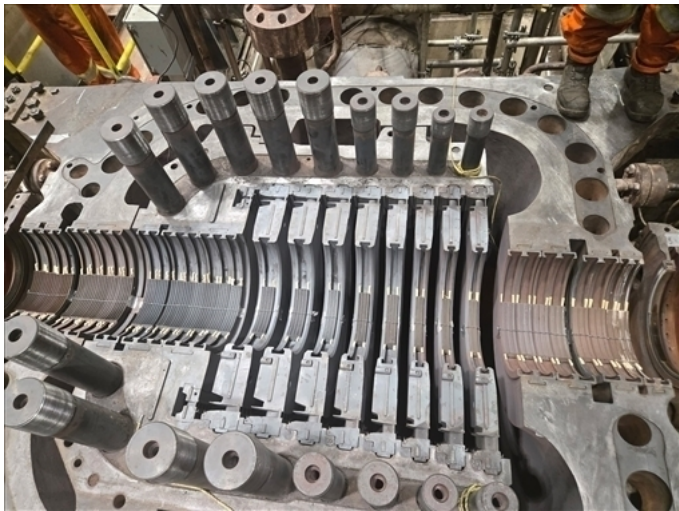
**Recommendations**

Readjust diaphragms to restore clearances to design conditions. Replace damaged/worn seals.

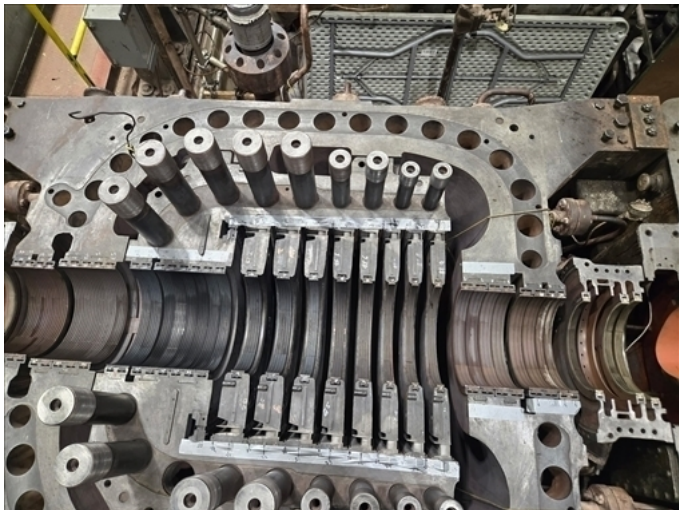
**2.6.1 Photo Attachments**



**2.6.1.1 AF Diaphragm Airfoil**



2.6.1.2 AL Bottom Lead Checks



2.6.1.3 AL Diaphragms Return to Service

2.7. IP Turbine - Governor Valve

Activity

Remove, clean, replace valve head & stem, and reinstall.

As Found

There were no findings related to this activity.

Action Taken

Valve relays and valve leak off piping were removed. Scope was cancelled because customer had no replacement valve heads onsite. Relays and piping were reinstalled, no further valve work.

Recommendations

There are no recommendations related to this activity.

## 2.8. Lube Oil System - Main Lube Oil Pump

### Activity

Disassemble, clean, inspect and reassemble.

### As Found

As Found HP-MOP alignment data was recorded. Customer decided to cancel MOP inspection as they were satisfied with the recorded data and were concerned that opening the pump for no reason could create an issue that didn't already exist.

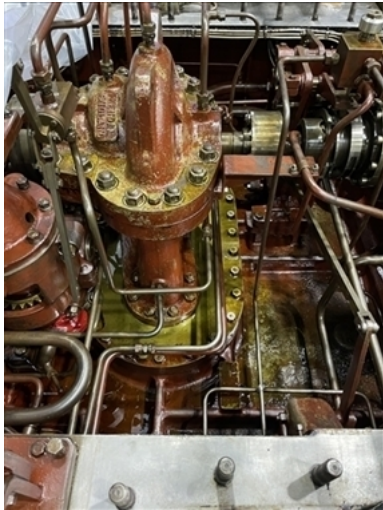
### Action Taken

Front pedestal was cleaned, recorded As Left HP-MOP alignment data and bolted the couplings. Replaced one of the coupling bolts, the new bolt was weighed to be approximately the same as the old bolt. Sealant was applied to half joint prior to setting the front pedestal cover.

### Recommendations

Replace the full set of coupling bolts.

#### 2.8.1 Photo Attachments



2.8.1.1 AF Front Pedestal



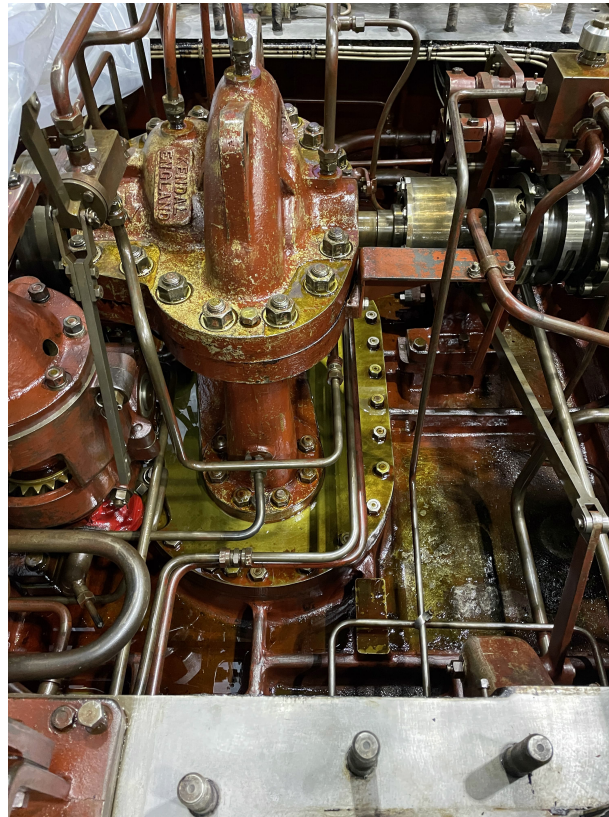
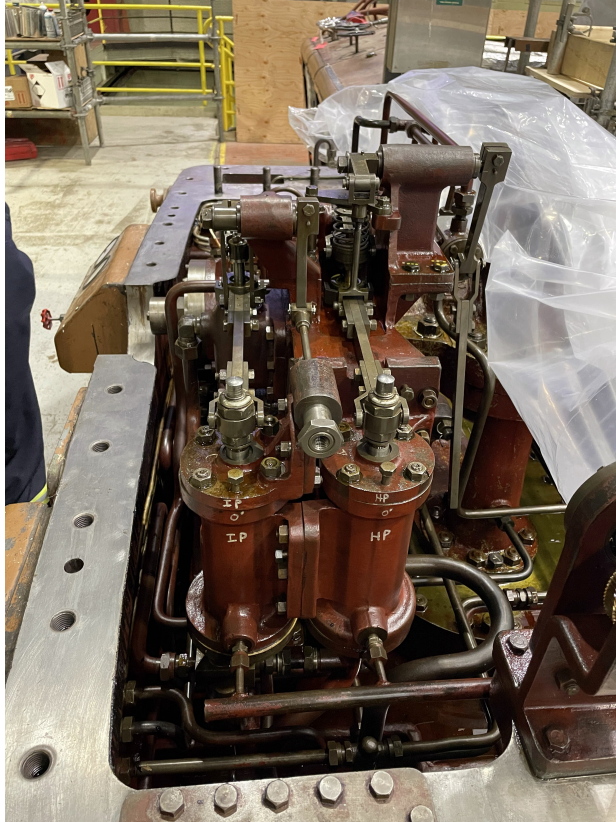
2.8.1.2 AF Front Pedestal



2.8.1.3 AL Front Pedestal

3. Datasheets

|                       |            |          |                  |                            |                   |                       |                  |
|-----------------------|------------|----------|------------------|----------------------------|-------------------|-----------------------|------------------|
| CLIENT                | NS Power   |          | ORDER No.        | READINGS TAKEN BY: M. Ryan | DATE:             | WP/ITP REF#           | IR SHEET REF.    |
| LOCATION              | Tufts Cove |          | PROOF READY BY:  | SUPERVISED BY:             | Oct 14/25         | P-EFP-3083.01-0001-02 | MI.O.01          |
| STATUS WHEN INSPECTED | UNIT No.   | 1        | INSTRUMENT TYPE: | N/A                        | CAL DUE DATE: N/A |                       | COMPONENT ID No. |
|                       |            | As Found | M/C No.          | INSTRUMENT No.             | N/A               |                       |                  |



REMARKS:

**SIEMENS**  
energy

Reviewed by TFA: Matthew Ryan  
 Verified by QA: Matthew Ryan  
 Reviewed by Eng: Matthew Ryan  
 Date: 27/10/2025  
 Ref #:

**CONDITION OF MAIN OIL PUMP**

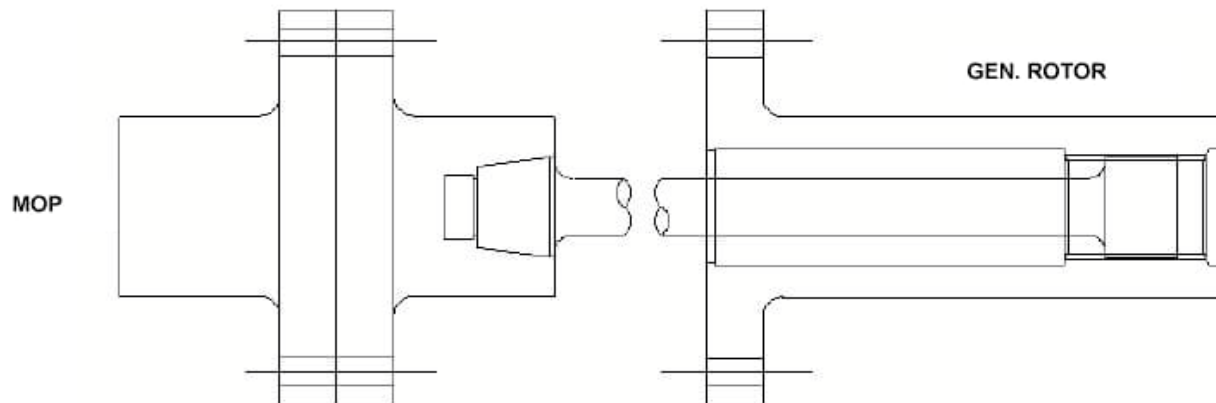
Ref #.

1

Sheet of

[illegible]

|                            |                |                  |                              |           |                       |                 |
|----------------------------|----------------|------------------|------------------------------|-----------|-----------------------|-----------------|
| CLIENT <b>NS Power</b>     | ORDER No.      |                  | READINGS TAKEN BY: D. Martin | DATE:     | WP/ITP REF#           | IR SHEET REF.   |
| LOCATION <b>Tufts Cove</b> | PROOF READ BY: |                  | SUPERVISED BY: A. Molnar     | Oct 16/25 | P-EFP-3083.01-0001-01 | <b>BG.O.526</b> |
| STATUS WHEN INSPECTED      | UNIT No.       | INSTRUMENT TYPE: | CAL DUE DATE:                |           | COMPONENT ID No.      |                 |
| As Left                    | M/C No.        | INSTRUMENT No.   |                              |           |                       |                 |



NOTE. CHECK MOP SPLINE SHAFT DRIVE "BACKLASH" FROM THE COUPLING BOLT

|                             |       |
|-----------------------------|-------|
| BACKLASH FROM COUPLING BOLT | 0.045 |
|-----------------------------|-------|

REMARKS:

|  |                                                                                      |                                                                                                                   |                           |                                              |             |
|--|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------------------|----------------------------------------------|-------------|
|  | Reviewed by TFA: <b>Matthew Ryan</b><br>Disposition Required <b>2/2/2025</b><br>Ref# | Verified by QA: <b>Matthew Ryan</b> , o=Siemens Energy, email=matthew.ryan@siemens-energy.com<br>Date: 2025-01-02 | Reviewed by Eng:<br>Date: | <b>MOP DRIVE SHAFT "BACKLASH" INSPECTION</b> | Ref #.<br>7 |
|--|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------------------|----------------------------------------------|-------------|

|                                             |                |                  |                             |       |                                      |                                  |
|---------------------------------------------|----------------|------------------|-----------------------------|-------|--------------------------------------|----------------------------------|
| CLIENT    NS Power<br>LOCATION   Tufts Cove | ORDER No.      |                  | READINGS TAKEN BY: B. Smith | DATE: | WP/ITP REF#<br>P-EFP-3083.01-0001-02 | IR SHEET REF.<br><b>BG.O.524</b> |
|                                             | PROOF READ BY: |                  | SUPERVISED BY: A. Molnar    |       |                                      |                                  |
| STATUS WHEN INSPECTED<br><br>As Found       | UNIT No. 1     | INSTRUMENT TYPE: | CAL DUE DATE:               |       |                                      | COMPONENT ID No.                 |
|                                             | M/C No.        | INSTRUMENT No.   |                             |       |                                      |                                  |

|            |  |       |  |  |
|------------|--|-------|--|--|
| KEEP NIP   |  | 0.002 |  |  |
| Taken By:- |  | Date: |  |  |

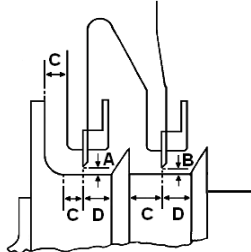
  

| BEARING & JOURNAL READINGS   |                 |         |          |      |
|------------------------------|-----------------|---------|----------|------|
|                              |                 | READING | Taken By | Date |
| Journal Diameter             |                 | 6.988   |          |      |
| Semi Height                  |                 |         |          |      |
| Bridge Gauge<br>Reading      | Top             |         |          |      |
|                              | Side            |         |          |      |
| Bearing<br>Oil<br>Clearances | Turbine End X   | 0.005   |          |      |
|                              | Generator End X | 0.005   |          |      |
|                              | Turbine End Y   | 0.005   |          |      |
|                              | Generator End Y | 0.005   |          |      |
|                              | Top             | 0.012   |          |      |

| BEARING VISUAL INSPECTION; COMMENTS:- |  |
|---------------------------------------|--|
|                                       |  |
| NAME                                  |  |
| DATE                                  |  |



Note: for axial readings record only the 'MINIMUM' clearance at positions C and D.

| MAIN OIL BAFFLE CLEARANCES               |   |   |     |        |
|------------------------------------------|---|---|-----|--------|
| POSITION                                 | X | Y | TOP | BOTTOM |
| A                                        |   |   |     |        |
| B                                        |   |   |     |        |
| C                                        |   |   |     |        |
| D                                        |   |   |     |        |
| Shaft Position When Axial Readings Taken |   |   |     |        |
| Taken By:-                               |   |   |     |        |
| Date:-                                   |   |   |     |        |

| PEDESTAL LEVELS                                                                               |                                                                                               |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <div style="border-left: 1px solid black; height: 100px; margin: 0 auto; width: 20px;"></div> | <div style="border-left: 1px solid black; height: 100px; margin: 0 auto; width: 20px;"></div> |
| TE                                                                                            | GE                                                                                            |
| Date                                                                                          |                                                                                               |
| Taken By                                                                                      |                                                                                               |

| BEARING OIL WIPER CLEARANCES |        |        |     |        |
|------------------------------|--------|--------|-----|--------|
| POSITION                     | X      | Y      | TOP | BOTTOM |
| Turbine End                  | 5.2520 | 5.2405 |     | 5.2525 |
| Generator End                |        |        |     |        |
| Taken By:-                   |        |        |     |        |
| Date:-                       |        |        |     |        |

| JOURNAL LEVEL |    |  |
|---------------|----|--|
| TE            | GE |  |
| Date          |    |  |
| Taken By      |    |  |

| BEARING NDT RESULTS |           |               |      |
|---------------------|-----------|---------------|------|
|                     | Pass/Fail | NDT Report No | Date |
| Top Half            |           |               |      |
| Btm Half            |           |               |      |

| JOURNAL LEVEL |    |  |
|---------------|----|--|
| TE            | GE |  |
| Date          |    |  |
| Taken By      |    |  |

| FINAL PRE BOX-UP INSPECTION OF BRG WELL |  |      |  |
|-----------------------------------------|--|------|--|
| CHECKED BY                              |  | DATE |  |
| WITNESSED BY                            |  | DATE |  |

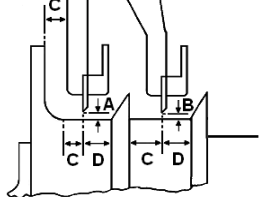
|                                                                                     |                                                                                                                                                                                                     |                                                                                                                            |                           |                                           |                    |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------------------------------|--------------------|
|  | Reviewed by TFA: <b>Matthew Ryan</b><br>Email: <a href="mailto:matthew.ryan@siemens-energy.com">matthew.ryan@siemens-energy.com</a><br>Date: 09/10/2023 11:04:00<br>Disposition Required: N<br>Ref# | Verified by QA: <b>Matthew Ryan</b> , o=Siemens Energy, email=matthew.ryan@siemens-energy.com<br>Date: 09/10/2023 11:04:00 | Reviewed by Eng:<br>Date: | <b>1 BEARING AND PEDESTAL INSPECTIONS</b> | Ref #.<br><b>9</b> |
|                                                                                     | (This area is intentionally left blank for additional information or comments.)                                                                                                                     |                                                                                                                            |                           |                                           |                    |

|                                       |                       |                  |                    |       |                                      |                                  |
|---------------------------------------|-----------------------|------------------|--------------------|-------|--------------------------------------|----------------------------------|
| CLIENT    NS Power                    | ORDER No.             |                  | READINGS TAKEN BY: | DATE: | WP/ITP REF#<br>P-EFP-3083.01-0001-02 | IR SHEET REF.<br><b>BG.O.524</b> |
|                                       | LOCATION   Tufts Cove |                  | PROOF READ BY:     |       |                                      |                                  |
| STATUS WHEN INSPECTED<br><br>As Found | UNIT No.   1          | INSTRUMENT TYPE: | CAL DUE DATE:      |       | COMPONENT ID No.                     |                                  |
|                                       | M/C No.               | INSTRUMENT No.   |                    |       |                                      |                                  |

| BEARING & JOURNAL READINGS    |                 |          |      |
|-------------------------------|-----------------|----------|------|
|                               | READING         | Taken By | Date |
| Journal Diameter              | 9.984           |          |      |
| Semi Height                   |                 |          |      |
| Bridge Gauge<br>Reading       | Top<br>Side     |          |      |
| <b>Bearing Oil Clearances</b> | Turbine End X   | 0.007    |      |
|                               | Generator End X | 0.0075   |      |
|                               | Turbine End Y   | 0.007    |      |
|                               | Generator End Y | 0.008    |      |
|                               | Top             | 0.017    |      |

| MAIN OIL BAFFLE CLEARANCES               |   |   |                |
|------------------------------------------|---|---|----------------|
| POSITION                                 | X | Y | (TOP / BOTTOM) |
| A                                        |   |   |                |
| B                                        |   |   |                |
| C                                        |   |   |                |
| D                                        |   |   |                |
| Shaft Position When Axial Readings Taken |   |   | (Birdseye)     |
| Taken By:-                               |   |   |                |
| Date:-                                   |   |   |                |



Note: for axial readings record only the 'MINIMUM' clearance at positions C and D.

| BEARING OIL WIPER CLEARANCES |       |       |              |
|------------------------------|-------|-------|--------------|
| POSITION                     | X     | Y     | TOP / BOTTOM |
| Turbine End                  | 4.189 | 4.165 | 4.198        |
| Generator End                |       |       |              |
| Taken By:-                   |       |       |              |
| Date:-                       |       |       |              |

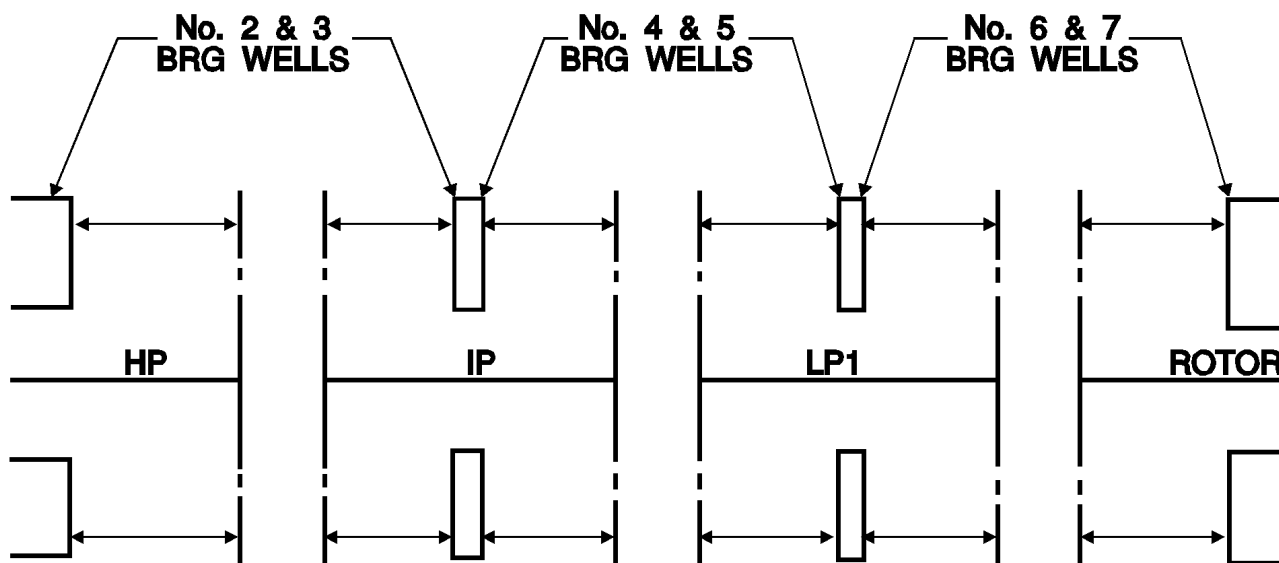
| BEARING NDT RESULTS |           |               |      |
|---------------------|-----------|---------------|------|
|                     | Pass/Fail | NDT Report No | Date |
| Top Half            |           |               |      |
| Btm Half            |           |               |      |

| FINAL PRE BOX-UP INSPECTION OF BRG WELL |  |      |  |
|-----------------------------------------|--|------|--|
| CHECKED BY                              |  | DATE |  |
| WITNESSED BY                            |  | DATE |  |

|                                                                                     |                                                                                     |                                                                                                                                    |                           |                                                 |                         |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------------------------------------|-------------------------|
|  | Reviewed by TFA:<br><b>Matthew Ryan</b><br>Disposition Required: 02/11/2024<br>Ref# | Verified by QA:<br>Matthew Ryan<br>cn=Matthew Ryan, o=Siemens Energy,<br>email=matthew.ryan@siemens-energy.com<br>Date: 02/11/2024 | Reviewed by Eng:<br>Date: | <div>2/3 BEARING AND PEDESTAL INSPECTIONS</div> | Ref #.<br><div>10</div> |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------------------------------------|-------------------------|

|                                   |            |                  |                    |               |                       |                  |
|-----------------------------------|------------|------------------|--------------------|---------------|-----------------------|------------------|
| CLIENT                            | NS Power   | ORDER No.        | READINGS TAKEN BY: | DATE:         | WP/ITP REF#           | IR SHEET REF.    |
| LOCATION                          | Tufts Cove | PROOF READ BY:   | SUPERVISED BY:     |               | P-EFP-3083.01-0001-02 | <b>AL.O.31c</b>  |
| STATUS WHEN INSPECTED<br>As Found | UNIT No. 1 | INSTRUMENT TYPE: |                    | CAL DUE DATE: |                       | COMPONENT ID No. |
|                                   | M/C No.    | INSTRUMENT No.   |                    |               |                       |                  |



| POSITION       |
|----------------|
| <u>LH</u> SIDE |
| <u>RH</u> SIDE |

| No.2  |
|-------|
| 5.967 |
| 5.962 |

| No.3   | No.4 |
|--------|------|
| 4.4925 |      |
| 4.493  |      |

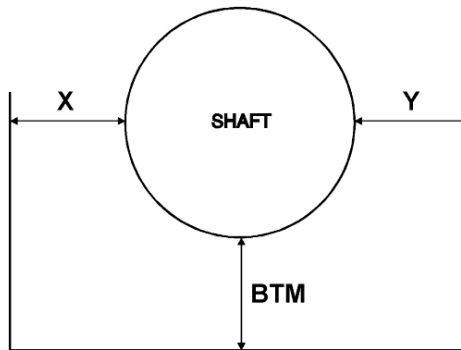
| No.5 | No.6 |
|------|------|
|      |      |
|      |      |

| No.7 |
|------|
|      |
|      |

REMARKS:

|  |                                                                                                                                                                         |                                                                                                                                                 |                           |                                      |                     |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------------------------|---------------------|
|  | Reviewed by TFA: <b>Matthew Ryan</b><br><small>Matthew Ryan, o=Siemens Energy, email=matthew.ryan@siemens-energy.com</small><br>Disposition Required: <b>OK</b><br>Ref# | Verified by QA: <b>Matthew Ryan</b><br><small>Matthew Ryan, o=Siemens Energy, email=matthew.ryan@siemens-energy.com</small><br>Date: 02/11/2024 | Reviewed by Eng:<br>Date: | <b>SHAFT POSITION AXIAL BIRDSEYE</b> | Ref #.<br><b>11</b> |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------------------------|---------------------|

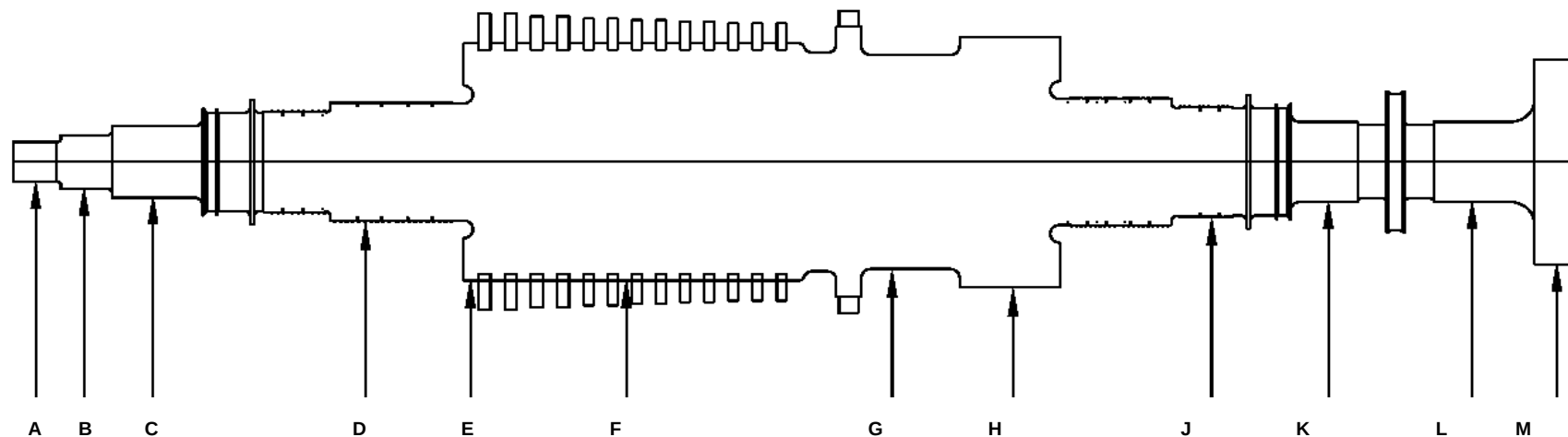
|                                             |                |                  |                    |       |                                      |                                 |
|---------------------------------------------|----------------|------------------|--------------------|-------|--------------------------------------|---------------------------------|
| CLIENT    NS Power<br>LOCATION   Tufts Cove | ORDER No.      |                  | READINGS TAKEN BY: | DATE: | WP/ITP REF#<br>P-EFP-3083.01-0001-02 | IR SHEET REF.<br><b>AL.O.27</b> |
|                                             | PROOF READ BY: |                  | SUPERVISED BY:     |       |                                      |                                 |
| STATUS WHEN INSPECTED<br><br>As Found       | UNIT No.   1   | INSTRUMENT TYPE: | CAL DUE DATE:      |       |                                      | COMPONENT ID No.                |
|                                             | M/C No.        | INSTRUMENT No.   |                    |       |                                      |                                 |

[illegible]

REMARKS:

|                                                                                     |                                                                                  |                                              |                           |                                        |                                |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------|---------------------------|----------------------------------------|--------------------------------|
|  | Reviewed by TFA: <b>Matthew Ryan</b><br>Disposition Required: <b>Y/N</b><br>Ref# | Verified by QA: <b>Matthew Ryan</b><br>Date: | Reviewed by Eng:<br>Date: | <b>SHAFT POSITION RADIAL BIRDSEYES</b> | <b>Ref #.</b><br><br><b>12</b> |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------|---------------------------|----------------------------------------|--------------------------------|

|                                       |                               |                  |                              |                          |                                      |                                  |
|---------------------------------------|-------------------------------|------------------|------------------------------|--------------------------|--------------------------------------|----------------------------------|
| CLIENT<br><b>NS Power</b>             | ORDER No.                     |                  | READINGS TAKEN BY: D. Martin | DATE:                    | WP/ITP REF#<br>P-EFP-3083.01-0001-02 | IR SHEET REF.<br><b>HP.B.506</b> |
|                                       | LOCATION<br><b>Tufts Cove</b> |                  | PROOF READ BY:               | SUPERVISED BY: A. Molnar |                                      |                                  |
| STATUS WHEN INSPECTED<br><br>As Found | UNIT No. 1                    | INSTRUMENT TYPE: |                              | CAL DUE DATE:            |                                      | COMPONENT ID No.                 |
|                                       | M/C No.                       | INSTRUMENT No.   |                              |                          |                                      |                                  |



| REF | A (.0001) | B (.0001) | C (.0001) | D (.0001) | E (.001) | F (.001) | G (.001) | H (.0001) | J (.0001) | K (.0001) | L (.0001) | M (.0001) |
|-----|-----------|-----------|-----------|-----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|
| 1   |           |           | 0         | 0         |          | 0        |          | 0         |           | 0         |           | 0         |
| 2   |           |           | 0         | -1.5      |          | 1        |          | -1        |           | 0         |           | -1        |
| 3   |           |           | 0         | 0         |          | 0        |          | -2        |           | 0         |           | -1.5      |
| 4   |           |           | 0         | 0         |          | 1        |          | -0.5      |           | 0         |           | -1.5      |
| 5   |           |           | 0         | 0         |          | 1        |          | -1.5      |           | 0         |           | -2.5      |
| 6   |           |           | -0.5      | 0.5       |          | 1        |          | -0.5      |           | -0.5      |           | -2        |
| 7   |           |           | 0         | 1         |          | 1        |          | -1        |           | -0.5      |           | -2.5      |
| 8   |           |           | 0         | 1         |          | 0        |          | -1        |           | 0         |           | -0.5      |

REMARKS:

**SIEMENS**  
energy

Reviewed by TFA: Matthew Ryan  
 Verified by QA: Matthew Ryan, o=Siemens Energy, email=matthew.ryan@siemens-energy.com  
 Disposition Required: 11/02/25  
 Date: 11/04/00  
 Ref#

Reviewed by Eng:

Date:

**HP TRUTH CHECK**

Ref #.

13

# SIEMENS energy

## COUPLING ALIGNMENT - HP TO IP

CUSTOMER: \_\_\_\_\_

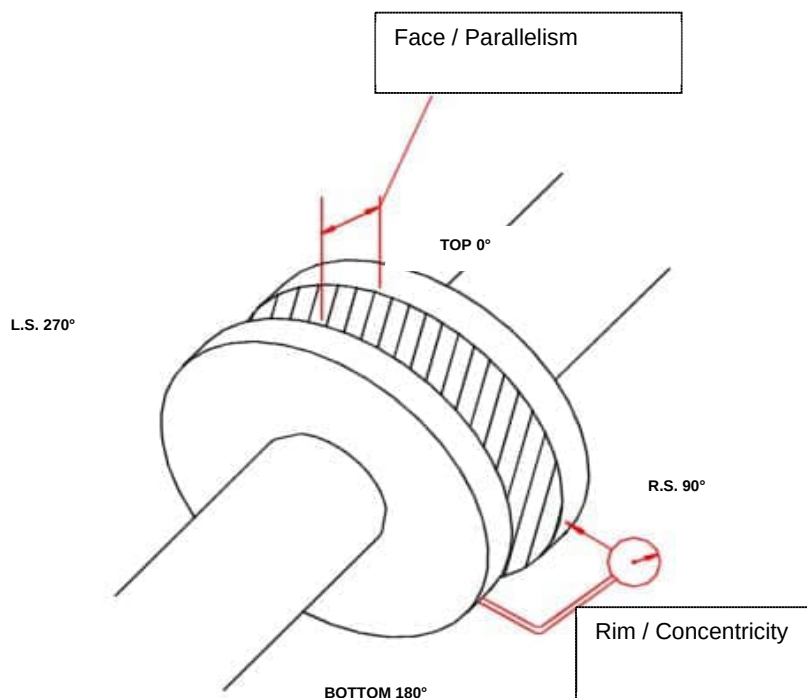
JOB NO.: \_\_\_\_\_

UNIT SERIAL NO.: \_\_\_\_\_

UNIT ID: \_\_\_\_\_

  X   DISASSEMBLY          ASSEMBLY

COUPLING LOCATION \_\_\_\_\_  
INDICATOR ATTACHED TO \_\_\_\_\_  
BUTTON RIDING ON \_\_\_\_\_



|                   | PARALLEL |        |        |        |          | RIM<br>CONCENTRICITY |                      |
|-------------------|----------|--------|--------|--------|----------|----------------------|----------------------|
|                   | 0°       | 90°    | 180°   | 270°   | AVERAGE  | 1 <sup>st</sup> Pass | 2 <sup>nd</sup> Pass |
| <b>TOP</b>        | 0.0186   | 0.0186 | 0.0183 | 0.0187 | 0.01855  | 0.0250               |                      |
| <b>BOTTOM</b>     | 0.0149   | 0.0171 | 0.0167 | 0.0179 | 0.01665  | 0.0225               |                      |
| <b>RIGHT SIDE</b> | 0.0165   | 0.0169 | 0.0169 | 0.0188 | 0.017275 | 0.0225               |                      |
| <b>LEFT SIDE</b>  | 0.0170   | 0.0188 | 0.0181 | 0.0178 | 0.017925 | 0.0250               |                      |

**Note:** 1<sup>st</sup> Rim Pass is taken with face readings. 2<sup>nd</sup> Rim Pass is an independent verification check.

S/N OF PRECISION TOOL \_\_\_\_\_ CALIBRATION DATE \_\_\_\_\_

RECORDED BY: P. Maclean/D. Martin

REVIEWED BY: \_\_\_\_\_

**Matthew  
Ryan**

Matthew Ryan  
cn=Matthew Ryan, o=Siemens  
Energy,  
email=matthew.ryan@siemens-  
energy.com  
2026.01.02 11:19:34 -04'00'

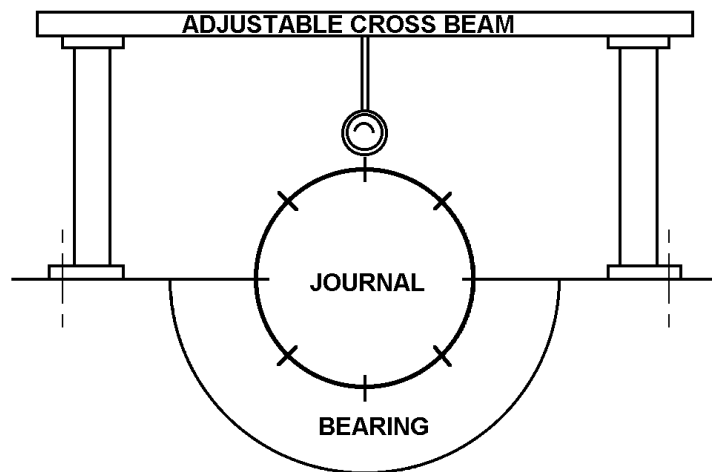
FILE: 8-02-08 SGT6-5000F (W501F)/REV. 07

DATE: Oct 17/25

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|                                   |                |                    |               |                       |                  |
|-----------------------------------|----------------|--------------------|---------------|-----------------------|------------------|
| CLIENT NS Power                   | ORDER No.      | READINGS TAKEN BY: | DATE:         | WP/ITP REF#           | IR SHEET REF.    |
| LOCATION Tufts Cove               | PROOF READ BY: | SUPERVISED BY:     |               | P-EFP-3083.01-0001-02 | <b>AL.O.04a</b>  |
| STATUS WHEN INSPECTED<br>As Found | UNIT No. 1     | INSTRUMENT TYPE:   | CAL DUE DATE: |                       | COMPONENT ID No. |
|                                   | M/C No.        | INSTRUMENT No.     |               |                       |                  |

\_\_\_\_ SIDE      LOOKING FROM GOVERNOR END      \_\_\_\_ SIDE



| FINAL CONCENTRICITY |                   |                   |
|---------------------|-------------------|-------------------|
| POSITION            | BRG No. <u>HP</u> | BRG No. <u>IP</u> |
| 0                   | 41                | 44                |
| 1                   | 47                | 40                |
| 2                   | 44                | 41                |
| 3                   | 48                | 44                |
| 4                   | 46                | 46                |
| 5                   | 48                | 48                |
| 6                   | 41                | 46                |
| 7                   | 44                | 47                |
| 0                   | 41                | 44                |

| OVALITY CHECK |              |              |
|---------------|--------------|--------------|
| POSITION      | BRG No. ____ | BRG No. ____ |
| 0             |              |              |
| 1             |              |              |
| 2             |              |              |
| 3             |              |              |
| 4             |              |              |
| 5             |              |              |
| 6             |              |              |
| 7             |              |              |
| 0             |              |              |

## NOTE:

ALL READINGS (x0.0001")

ROTATE SHAFTS \_\_\_\_ SIDE TO \_\_\_\_ SIDE BY 1/8 TURNS AND RECORD DIAL GAUGE READINGS.

ENSURE THAT CRANE IS NOT SUPPORTING SHAFT WHEN READINGS ARE BEING RECORDED.

MARK POSITION TAKEN ON GRAPHIC

No. \_\_\_\_ BEARING REMOVED

## REMARKS:

**SIEMENS**  
energy

Approved by TFA: Matthew Ryan  
 Disposition Required: Y/N  
 Ref#

Verified by QA: Matthew Ryan, o-Siemens Energy  
 email=matthew.ryan@siemens-energy.com  
 Date: 02/11/2021

Reviewed by Eng:  
 Date:

**COUPLING CONCENTRICITY**

Ref #.  
**15**

# SIEMENS energy

## COUPLING ALIGNMENT - HP-MOP

CUSTOMER: \_\_\_\_\_

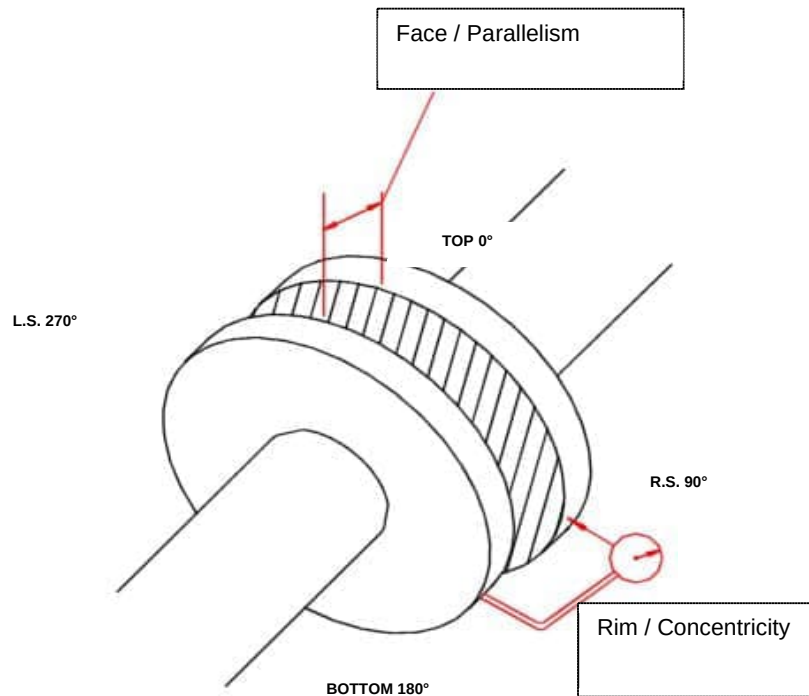
JOB NO.: \_\_\_\_\_

UNIT SERIAL NO.: \_\_\_\_\_

UNIT ID: \_\_\_\_\_

☒ DISASSEMBLY    ☐ ASSEMBLY

COUPLING LOCATION \_\_\_\_\_  
 INDICATOR ATTACHED TO \_\_\_\_\_  
 BUTTON RIDING ON \_\_\_\_\_



|            | PARALLEL |     |      |      |         | RIM<br>CONCENTRICITY |                      |
|------------|----------|-----|------|------|---------|----------------------|----------------------|
|            | 0°       | 90° | 180° | 270° | AVERAGE | 1 <sup>st</sup> Pass | 2 <sup>nd</sup> Pass |
| TOP        |          |     |      |      |         | 0.0048               | 0.0048               |
| BOTTOM     |          |     |      |      |         | 0.0010               | 0.0010               |
| RIGHT SIDE |          |     |      |      |         | 0.0033               | 0.0032               |
| LEFT SIDE  |          |     |      |      |         | 0.0028               | 0.0030               |

**Note:** 1<sup>st</sup> Rim Pass is taken with face readings. 2<sup>nd</sup> Rim Pass is an independent verification check.

S/N OF PRECISION TOOL \_\_\_\_\_ CALIBRATION DATE \_\_\_\_\_  
 \_\_\_\_\_

RECORDED BY: \_\_\_\_\_ REVIEWED BY: \_\_\_\_\_

Matthew Ryan  
 cn=Matthew Ryan, o=Siemens  
 Energy,  
 email=matthew.ryan@siemens-  
 energy.com  
 2026-01-02 11:20:16 -0400

FILE: 8-02-08 SGT6-5000F (W501F)/REV. 07

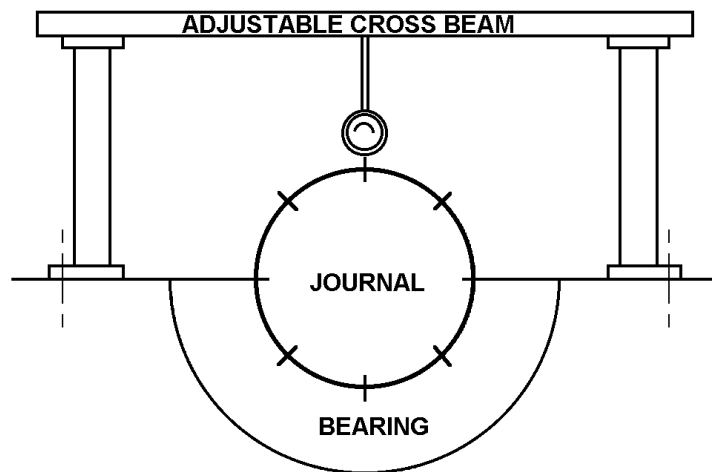
DATE: \_\_\_\_\_

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|                                   |                |                    |               |                       |                  |
|-----------------------------------|----------------|--------------------|---------------|-----------------------|------------------|
| CLIENT NS Power                   | ORDER No.      | READINGS TAKEN BY: | DATE:         | WP/ITP REF#           | IR SHEET REF.    |
| LOCATION Tufts Cove               | PROOF READ BY: | SUPERVISED BY:     |               | P-EFP-3083.01-0001-02 | <b>AL.O.04a</b>  |
| STATUS WHEN INSPECTED<br>As Found | UNIT No. 1     | INSTRUMENT TYPE:   | CAL DUE DATE: |                       | COMPONENT ID No. |
|                                   | M/C No.        | INSTRUMENT No.     |               |                       |                  |

LOOKING FROM GOVERNOR END

\_\_\_\_ SIDE                      \_\_\_\_ SIDE



| FINAL CONCENTRICITY |                   |                    |
|---------------------|-------------------|--------------------|
| POSITION            | BRG No. <u>HP</u> | BRG No. <u>MOF</u> |
| 0                   | 0.0049            | 0.0058             |
| 1                   | 0.0052            | 0.0063             |
| 2                   | 0.0048            | 0.0060             |
| 3                   | 0.0046            | 0.0056             |
| 4                   | 0.0046            | 0.0048             |
| 5                   | 0.0043            | 0.0042             |
| 6                   | 0.0051            | 0.0051             |
| 7                   | 0.0050            | 0.0058             |
| 0                   | 0.0048            | 0.0058             |

| OVALITY CHECK |              |              |
|---------------|--------------|--------------|
| POSITION      | BRG No. ____ | BRG No. ____ |
| 0             |              |              |
| 1             |              |              |
| 2             |              |              |
| 3             |              |              |
| 4             |              |              |
| 5             |              |              |
| 6             |              |              |
| 7             |              |              |
| 0             |              |              |

## NOTE:

ALL READINGS (x0.0001")

ROTATE SHAFTS \_\_\_\_ SIDE TO \_\_\_\_ SIDE BY 1/8 TURNS AND RECORD DIAL GAUGE READINGS.

ENSURE THAT CRANE IS NOT SUPPORTING SHAFT WHEN READINGS ARE BEING RECORDED.

MARK POSITION TAKEN ON GRAPHIC

No. \_\_\_\_ BEARING REMOVED

## REMARKS:

|  |                                                                             |                                                                                                                 |                               |                               |                     |
|--|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------|---------------------|
|  | Approved by TFA:<br><b>Matthew Ryan</b><br>Disposition Required Y/N<br>Ref# | Verified by QA:<br>Matthew Ryan, o=Siemens Energy,<br>email=matthew.ryan@siemens-energy.com<br>Date: 02/11/2020 | Reviewed by Eng:<br><br>Date: | <b>COUPLING CONCENTRICITY</b> | Ref #.<br><b>17</b> |
|  |                                                                             |                                                                                                                 |                               |                               |                     |

|                                       |                |                                |               |                       |                  |
|---------------------------------------|----------------|--------------------------------|---------------|-----------------------|------------------|
| CLIENT<br><b>NS Power</b>             | ORDER No.      | READINGS TAKEN BY: B. Smith    | DATE:         | WP/ITP REF#           | IR SHEET REF.    |
| LOCATION<br><b>Tufts Cove</b>         | PROOF READ BY: | SUPERVISED BY: A. Molnar       | Oct 12/25     | P-EFP-3083.01-0001-02 | <b>HP.A.529</b>  |
| STATUS WHEN INSPECTED<br><br>As Found | UNIT No. 1     | INSTRUMENT TYPE: Feeler gauges | CAL DUE DATE: |                       | COMPONENT ID No. |
|                                       | M/C No.        | INSTRUMENT No.                 |               |                       |                  |

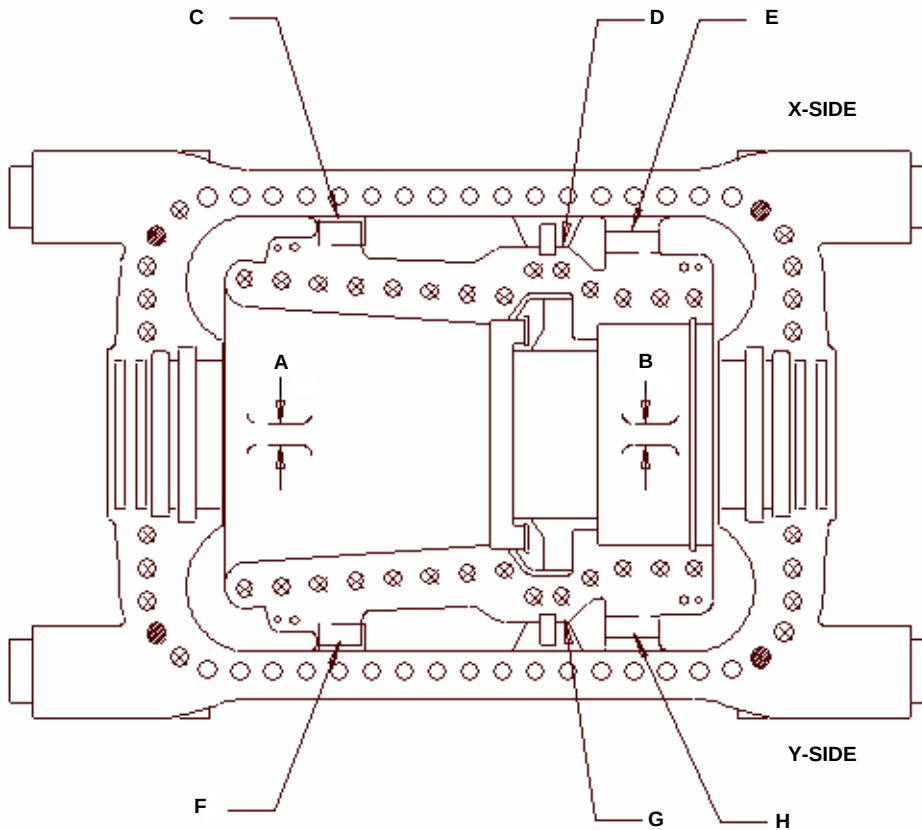
ALL READINGS x 0.001"

REMARKS:  
Bolted

|  |                                                                                  |                                              |                           |                                                                                 |                         |
|--|----------------------------------------------------------------------------------|----------------------------------------------|---------------------------|---------------------------------------------------------------------------------|-------------------------|
|  | Reviewed by TFA: <b>Matthew Ryan</b><br>Disposition Required: <b>Y/N</b><br>Ref# | Verified by QA: <b>Matthew Ryan</b><br>Date: | Reviewed by Eng:<br>Date: | <h2 style="margin: 0;">HP CYLINDER HORIZONTAL JOINT GAP CHECK (150MW TYPE)</h2> | Ref #.<br><br><b>18</b> |
|--|----------------------------------------------------------------------------------|----------------------------------------------|---------------------------|---------------------------------------------------------------------------------|-------------------------|

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|                            |                |                  |                             |               |                       |                  |
|----------------------------|----------------|------------------|-----------------------------|---------------|-----------------------|------------------|
| CLIENT <b>NS Power</b>     | ORDER No.      |                  | READINGS TAKEN BY: B. Smith | DATE:         | WP/ITP REF#           | IR SHEET REF.    |
| LOCATION <b>Tufts Cove</b> | PROOF READ BY: |                  | SUPERVISED BY: J. McPhee    | Oct 16/25     | P-EFP-3083.01-0001-02 | <b>HP.A.535</b>  |
| STATUS WHEN INSPECTED      | UNIT No. 1     | INSTRUMENT TYPE: | Feeler Gauges               | CAL DUE DATE: |                       | COMPONENT ID No. |
| As Found                   | M/C No.        | INSTRUMENT No.   |                             |               |                       |                  |



| LOCATION | INNER CYL BOLTS |       |
|----------|-----------------|-------|
|          | TIGHT           | SLACK |
| A        |                 |       |
| B        |                 |       |
| C        | 0.225           | 0.240 |
| D        | 0.240           | 0.251 |
| E        | 0.270           | 0.278 |
| F        | 0.323           | 0.340 |
| G        | 0.265           | 0.278 |
| H        | 0.312           | 0.325 |

REMARKS:

|  |                                                            |                                                                                                           |                           |                                                      |        |
|--|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------|------------------------------------------------------|--------|
|  | Reviewed by TFA: Matthew Ryan<br>Disposition Required: Y/N | Verified by QA: Matthew Ryan, o=Siemens Energy, email=matthew.ryan@siemens-energy.com<br>Date: 2025.10.24 | Reviewed by Eng:<br>Date: | <b>HP CYLINDER INNER TO OUTER CYLINDER REFERENCE</b> | Ref #. |
|  |                                                            |                                                                                                           |                           |                                                      | 19     |

|                            |  |                |                  |                             |  |           |               |                       |  |                  |  |
|----------------------------|--|----------------|------------------|-----------------------------|--|-----------|---------------|-----------------------|--|------------------|--|
| CLIENT <b>NS Power</b>     |  | ORDER No.      |                  | READINGS TAKEN BY: B. Smith |  | DATE:     |               | WP/ITP REF#           |  | IR SHEET REF.    |  |
| LOCATION <b>Tufts Cove</b> |  | PROOF READ BY: |                  | SUPERVISED BY: A. Molnar    |  | Oct 23/25 |               | P-EFP-3083.01-0001-02 |  | <b>GL.O.524</b>  |  |
| STATUS WHEN INSPECTED      |  | UNIT No. 1     | INSTRUMENT TYPE: |                             |  |           | CAL DUE DATE: |                       |  | COMPONENT ID NO. |  |
| As Found                   |  | M/C No.        | INSTRUMENT No.   |                             |  |           |               |                       |  |                  |  |

|   |       |       |       |       |  | RADIAL CLEARANCES |        |        |       |       |          |
|---|-------|-------|-------|-------|--|-------------------|--------|--------|-------|-------|----------|
|   |       |       |       |       |  | RING No           | X SIDE | Y SIDE | TOP   | BTM   | BUTT CLR |
|   |       |       |       |       |  | A                 | 0.290  | 0.305  |       |       |          |
|   |       |       |       |       |  | 1                 | 0.017  | 0.023  | 0.014 | 0.025 |          |
|   |       |       |       |       |  | B                 | 0.190  | 0.192  |       |       |          |
|   |       |       |       |       |  |                   |        |        |       |       |          |
|   |       |       |       |       |  |                   |        |        |       |       |          |
| A | 0.300 | 0.280 |       |       |  |                   |        |        |       |       |          |
| 2 | 0.017 | 0.024 | 0.014 | 0.024 |  |                   |        |        |       |       |          |
| B | 0.190 | 0.205 |       |       |  |                   |        |        |       |       |          |
|   |       |       |       |       |  |                   |        |        |       |       |          |
| A | 0.310 | 0.315 |       |       |  |                   |        |        |       |       |          |
| 3 | 0.020 | 0.034 | 0.021 | 0.023 |  |                   |        |        |       |       |          |
| B | 0.180 | 0.182 |       |       |  |                   |        |        |       |       |          |
|   |       |       |       |       |  |                   |        |        |       |       |          |
| A | 0.300 | 0.300 |       |       |  |                   |        |        |       |       |          |
| 4 | 0.020 | 0.032 | 0.019 | 0.023 |  |                   |        |        |       |       |          |
| B | 0.200 | 0.190 |       |       |  |                   |        |        |       |       |          |
|   |       |       |       |       |  |                   |        |        |       |       |          |
| A | 0.310 | 0.308 |       |       |  |                   |        |        |       |       |          |
| 5 | 0.021 | 0.034 | 0.020 | 0.025 |  |                   |        |        |       |       |          |
| B | 0.180 | 0.190 |       |       |  |                   |        |        |       |       |          |
|   |       |       |       |       |  |                   |        |        |       |       |          |
| A | 0.300 | 0.301 |       |       |  |                   |        |        |       |       |          |
| 6 | 0.020 | 0.045 | 0.021 | 0.026 |  |                   |        |        |       |       |          |
| B | 0.190 | 0.194 |       |       |  |                   |        |        |       |       |          |

| RADIAL CLEARANCES |        |        |       |       |
|-------------------|--------|--------|-------|-------|
| RING No           | X SIDE | Y SIDE | TOP   | BTM   |
| A                 | 0.296  | 0.290  |       |       |
| 7                 | 0.017  | 0.033  | 0.016 | 0.022 |
| B                 | 0.190  | 0.200  |       |       |
|                   |        |        |       |       |
| A                 | 0.286  | 0.288  |       |       |
| 8                 | 0.022  | 0.035  | 0.017 | 0.026 |
| B                 | 0.200  | 0.207  |       |       |
|                   |        |        |       |       |
|                   |        |        |       |       |
|                   |        |        |       |       |
|                   |        |        |       |       |
|                   |        |        |       |       |
|                   |        |        |       |       |
|                   |        |        |       |       |
|                   |        |        |       |       |
|                   |        |        |       |       |
|                   |        |        |       |       |
|                   |        |        |       |       |
|                   |        |        |       |       |
|                   |        |        |       |       |
|                   |        |        |       |       |

**AXIAL CLEARANCES (Inches)**

STM END                  GEN END

A      B

→ Towards Generator  
← Away From Generator

NOTE: AXIAL CLEARANCES TO BE CHECKED WITH SHAFT IN COLD RUNNING POSITION i.e. ON GENERATOR END PADS

|      |  |              |  |
|------|--|--------------|--|
| POS. |  | AXIAL CLR.s. |  |
| A    |  |              |  |
| B    |  |              |  |

|                                |             |
|--------------------------------|-------------|
| GLAND LINER THICKNESS (INCHES) |             |
| OUTER LINER                    | INNER LINER |
|                                |             |

|                             |      |               |
|-----------------------------|------|---------------|
| No. _____ BEARING (x0.001") |      |               |
| TOP                         | SIDE | SEMI - HEIGHT |
|                             |      |               |

Reviewed by TFA:  
**Matthew Ryan**  
Dispositions Required: 0  
Ref#:

Matthew Ryan, o=Siemens Energy, email=matthew.ryan@siemens-energy.com, ou=TFA, cn=Matthew Ryan, ou=Siemens Energy, email=matthew.ryan@siemens-energy.com, ou=TFA, cn=Matthew Ryan

Verified by QA:  
**Matthew Ryan**  
Date: 23/10/25

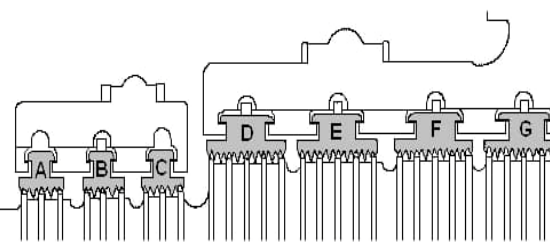
Reviewed by Eng:  
**Matthew Ryan**  
Date:

No. 1 GLAND RADIAL / AXIAL CLEARANCES (150MW TYPE M/C)

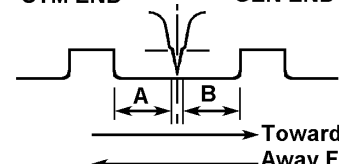
Ref #.  
20

|                                       |                |                             |               |                       |                  |
|---------------------------------------|----------------|-----------------------------|---------------|-----------------------|------------------|
| CLIENT <b>NS Power</b>                | ORDER No.      | READINGS TAKEN BY: B. Smith | DATE:         | WP/ITP REF#           | IR SHEET REF.    |
| LOCATION <b>Tufts Cove</b>            | PROOF READ BY: | SUPERVISED BY: A. Molnar    | Oct 23/25     | P-EFP-3083.01-0001-02 | <b>GL.O.525</b>  |
| STATUS WHEN INSPECTED<br><br>As Found | UNIT No. 1     | INSTRUMENT TYPE:            | CAL DUE DATE: |                       | COMPONENT ID No. |
|                                       | M/C No.        | INSTRUMENT No.              |               |                       |                  |



**AXIAL CLEARANCES (Inches)**  
STM END      GEN END



Towards Generator  
 ← Away From Generator

**NOTE: AXIAL CLEARANCES TO BE CHECKED WITH SHAFT IN COLD RUNNING POSITION i.e. ON GENERATOR END PADS**

| RIN<br>G No | RADIAL CLEARANCES |        |       |       |          |
|-------------|-------------------|--------|-------|-------|----------|
|             | X SIDE            | Y SIDE | TOP   | BTM   | BUTT CLR |
| A           | 0.130             | 0.121  |       |       |          |
| 9           | 0.016             | 0.022  | 0.021 | 0.023 |          |
| B           | 0.130             | 0.113  |       |       |          |
| A           | 0.110             | 0.118  |       |       |          |
| 10          | 0.015             | 0.020  | 0.024 | 0.017 |          |
| B           | 0.120             | 0.105  |       |       |          |
| A           | 0.120             | 0.120  |       |       |          |
| 11          | 0.017             | 0.021  | 0.025 | 0.017 |          |
| B           | 0.130             | 0.110  |       |       |          |
| A           | 0.130             | 0.127  |       |       |          |
| 12          | 0.030             | 0.020  | 0.022 | 0.019 |          |
| B           | 0.150             | 0.113  |       |       |          |
| A           | 0.120             | 0.120  |       |       |          |
| 13          | 0.023             | 0.018  | 0.024 | 0.020 |          |
| B           | 0.150             | 0.125  |       |       |          |
| A           | 0.103             | 0.107  |       |       |          |
| 14          | 0.020             | 0.018  | 0.024 | 0.019 |          |
| B           | 0.150             | 0.135  |       |       |          |
| A           | 0.140             | 0.120  |       |       |          |
| 15          | 0.015             | 0.020  | 0.023 | 0.020 |          |
| B           | 0.150             | 0.125  |       |       |          |
| A           | 0.130             | 0.110  |       |       |          |
| 16          | 0.015             | 0.011  | 0.019 | 0.025 |          |
| B           | 0.150             | 0.118  |       |       |          |

| RING<br>No | RADIAL CLEARANCES |        |       |       |          |
|------------|-------------------|--------|-------|-------|----------|
|            | X SIDE            | Y SIDE | TOP   | BTM   | BUTT CLR |
| A          | 0.100             | 0.090  |       |       |          |
| 17         | 0.030             | 0.035  | 0.018 | 0.018 |          |
| B          | 0.150             | 0.135  |       |       |          |
| A          | 0.020             | 0.024  |       |       |          |
| 18         | 0.027             | 0.035  | 0.015 | 0.018 |          |
| B          | 0.150             | 0.135  |       |       |          |
| A          | 0.100             | 0.090  |       |       |          |
| 19         | 0.025             | 0.035  | 0.014 | 0.020 |          |
| B          | 0.150             | 0.140  |       |       |          |
| A          | 0.101             | 0.100  |       |       |          |
| 20         | 0.020             | 0.024  | 0.018 | 0.019 |          |
| B          | 0.150             | 0.140  |       |       |          |
| A          | 0.100             | 0.080  |       |       |          |
| 21         | 0.020             | 0.023  | 0.018 | 0.019 |          |
| B          | 0.150             | 0.150  |       |       |          |
| A          | 0.100             | 0.080  |       |       |          |
| 22         | 0.030             | 0.024  | 0.018 | 0.019 |          |
| B          | 0.150             | 0.150  |       |       |          |
| A          | 0.090             | 0.075  |       |       |          |
| 23         | 0.016             | 0.020  | 0.014 | 0.023 |          |
| B          | 0.150             | 0.152  |       |       |          |
| A          | 0.092             | 0.080  |       |       |          |
| 24         | 0.029             | 0.030  | 0.020 | 0.020 |          |
| B          | 0.150             | 0.140  |       |       |          |
| A          | 0.105             | 0.081  |       |       |          |
| 25         | 0.010             | 0.015  | 0.021 | 0.020 |          |
| B          | 0.150             | 0.145  |       |       |          |

| POS. | AXIAL CLR. |
|------|------------|
| A    |            |
| B    |            |

| GLAND LINER THICKNESS (INCHES) |             |
|--------------------------------|-------------|
| OUTER LINER                    | INNER LINER |
|                                |             |

| No. _____ BEARING (x0.001") |      |               |
|-----------------------------|------|---------------|
| TOP                         | SIDE | SEMI - HEIGHT |
|                             |      |               |



Reviewed by TFA: **Matthew Ryan**  
 Disposition Required: **None**  
 Ref#

Verified by QA: **Matthew Ryan**  
 Date: 10/21/2025

Reviewed by Eng:  
 Date:

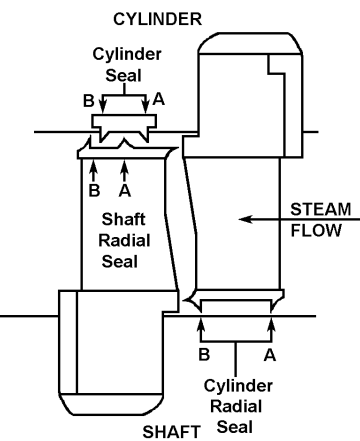
**No. 2 GLAND RADIAL / AXIAL CLEARANCES (150MW TYPE M/C)**

Ref #.

21

|                                       |                |                  |                             |  |  |               |           |                       |  |                  |  |  |  |
|---------------------------------------|----------------|------------------|-----------------------------|--|--|---------------|-----------|-----------------------|--|------------------|--|--|--|
| CLIENT <b>NS Power</b>                | ORDER No.      |                  | READINGS TAKEN BY: B. Smith |  |  |               | DATE:     | WP/ITP REF#           |  | IR SHEET REF.    |  |  |  |
| LOCATION <b>Tufts Cove</b>            | PROOF READ BY: |                  | SUPERVISED BY: A. Molnar    |  |  |               | Oct 23/25 | P-EFP-3083.01-0001-02 |  | <b>HP.C.02</b>   |  |  |  |
| STATUS WHEN INSPECTED<br><br>As Found | UNIT No. 1     | INSTRUMENT TYPE: |                             |  |  | CAL DUE DATE: |           |                       |  | COMPONENT ID No. |  |  |  |
|                                       | M/C No.        | INSTRUMENT No.   |                             |  |  |               |           |                       |  |                  |  |  |  |



SHAFT SET THUS WHEN READINGS TAKEN:

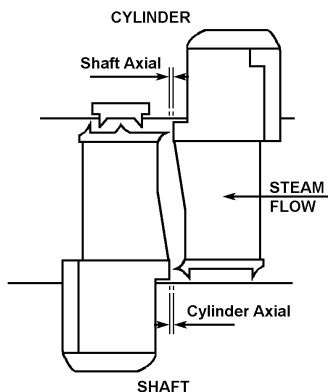
REMARKS :

| ROW No               |          | 1 | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     |       |  |  |  |  |  |  |
|----------------------|----------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--|--|--|--|--|
| CYLINDER RADIAL SEAL | ___ SIDE | A |       |       |       |       |       |       |       |       |       |  |  |  |  |  |  |
|                      |          | B |       |       |       |       |       |       |       |       |       |  |  |  |  |  |  |
|                      | ___ SIDE | A |       |       |       |       |       |       |       |       |       |  |  |  |  |  |  |
|                      |          | B |       |       |       |       |       |       |       |       |       |  |  |  |  |  |  |
|                      | TOP      | A |       |       |       |       |       |       |       |       |       |  |  |  |  |  |  |
|                      |          | B |       |       |       |       |       |       |       |       |       |  |  |  |  |  |  |
| BOTTOM               | A        |   |       |       |       |       |       |       |       |       |       |  |  |  |  |  |  |
|                      | B        |   |       |       |       |       |       |       |       |       |       |  |  |  |  |  |  |
| SHAFT RADIAL SEAL    | ___ SIDE | A |       |       |       |       |       |       |       |       |       |  |  |  |  |  |  |
|                      |          | B |       |       |       |       |       |       |       |       |       |  |  |  |  |  |  |
|                      | ___ SIDE | A |       |       |       |       |       |       |       |       |       |  |  |  |  |  |  |
|                      |          | B |       |       |       |       |       |       |       |       |       |  |  |  |  |  |  |
|                      | TOP      | A |       |       |       |       |       |       |       |       |       |  |  |  |  |  |  |
|                      |          | B |       |       |       |       |       |       |       |       |       |  |  |  |  |  |  |
| BOTTOM               | A        |   |       |       |       |       |       |       |       |       |       |  |  |  |  |  |  |
|                      | B        |   |       |       |       |       |       |       |       |       |       |  |  |  |  |  |  |
| CYLINDER SEAL        | X SIDE   | A | 0.061 | 0.076 | 0.078 | 0.067 | 0.076 | 0.065 | 0.085 | 0.060 | 0.049 |  |  |  |  |  |  |
|                      |          | B | 0.067 |       |       |       |       |       |       |       | 0.093 |  |  |  |  |  |  |
|                      | Y SIDE   | A | 0.050 | 0.069 | 0.077 | 0.078 | 0.086 | 0.067 | 0.085 | 0.045 | 0.044 |  |  |  |  |  |  |
|                      |          | B | 0.073 |       |       |       |       |       |       |       | 0.060 |  |  |  |  |  |  |
|                      | TOP      | A |       | 0.050 |       | 0.050 | 0.050 | 0.057 |       | 0.080 |       |  |  |  |  |  |  |
|                      |          | B | 0.050 |       |       |       |       |       |       |       | 0.100 |  |  |  |  |  |  |
|                      | BOTTOM   | A | 0.113 | 0.090 | 0.092 | 0.091 | 0.090 | 0.079 | 0.090 | 0.078 | 0.081 |  |  |  |  |  |  |
|                      |          | B | 0.111 |       |       |       |       |       |       |       | 0.092 |  |  |  |  |  |  |

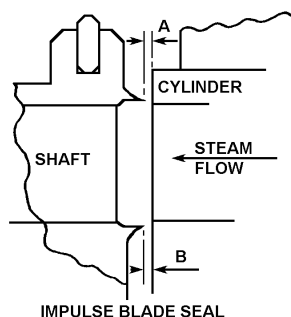
|                                                                                     |                                                                                                                                  |                                                                                                                                 |                  |                                           |        |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------|--------|
|  | Reviewed by TFA: Matthew Ryan<br>on=Matthew Ryan, o=Siemens Energy,<br>email=matthew.ryan@siemens-energy.com<br>2024-10-23 14:00 | Verified by QA: Matthew Ryan<br>on=Matthew Ryan, o=Siemens Energy,<br>email=matthew.ryan@siemens-energy.com<br>2024-10-23 14:00 | Reviewed by Eng: | <b>HP TURBINE RADIAL BLADE CLEARANCES</b> | Ref #. |
|                                                                                     | Disposition Required Y/N                                                                                                         | Date:                                                                                                                           | Date:            |                                           | 22     |

|                            |                |                  |                    |       |                       |                |
|----------------------------|----------------|------------------|--------------------|-------|-----------------------|----------------|
| CLIENT <b>NS Power</b>     | ORDER No.      |                  | READINGS TAKEN BY: | DATE: | WP/ITP REF#           | IR SHEET REF.  |
| LOCATION <b>Tufts Cove</b> | PROOF READ BY: |                  | SUPERVISED BY:     |       | P-EFP-3083.01-0001-02 | <b>HP.C.03</b> |
| STATUS WHEN INSPECTED      | UNIT No. 1     | INSTRUMENT TYPE: | CAL DUE DATE:      |       | COMPONENT ID No.      |                |
| As Found                   | M/C No.        | INSTRUMENT No.   |                    |       |                       |                |



| ROW No   |          | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10 | 11 | 12 |
|----------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|----|----|
| SHAFT    | X SIDE   | 0.056 | 0.061 | 0.054 | 0.080 | 0.094 | 0.085 | 0.077 | 0.101 | 0.105 |    |    |    |
|          | Y SIDE   | 0.059 | 0.067 | 0.085 | 0.088 | 0.090 | 0.084 | 0.091 | 0.097 | 0.100 |    |    |    |
| CYLINDER | ___ SIDE |       |       |       |       |       |       |       |       |       |    |    |    |
|          | ___ SIDE |       |       |       |       |       |       |       |       |       |    |    |    |

| ROW No   |          | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|----------|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| SHAFT    | ___ SIDE |    |    |    |    |    |    |    |    |    |    |    |    |
|          | ___ SIDE |    |    |    |    |    |    |    |    |    |    |    |    |
| CYLINDER | ___ SIDE |    |    |    |    |    |    |    |    |    |    |    |    |
|          | ___ SIDE |    |    |    |    |    |    |    |    |    |    |    |    |



| IMPULSE BLADE SEAL |   |   |
|--------------------|---|---|
|                    | A | B |
| ___ SIDE           |   |   |
| ___ SIDE           |   |   |

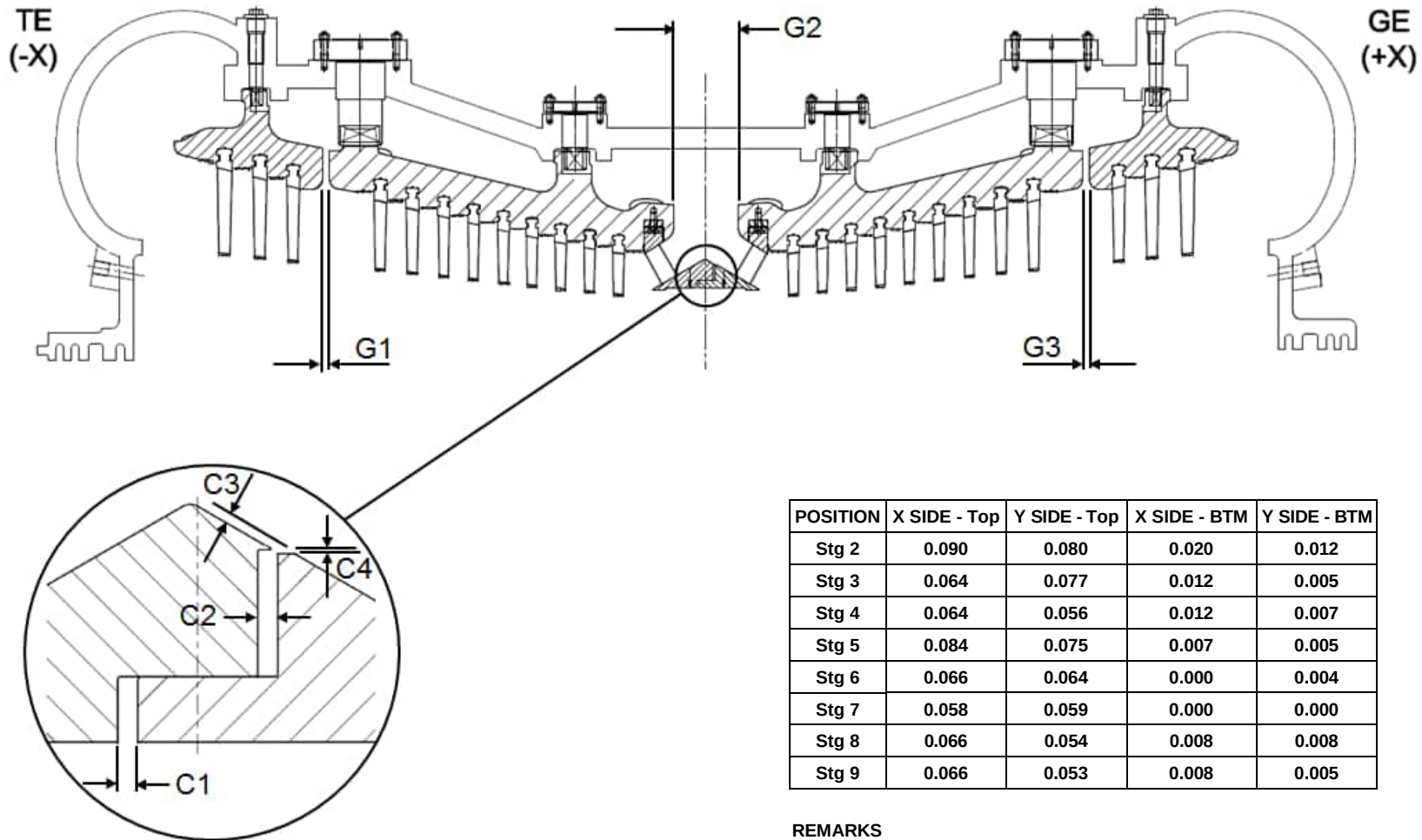
SHAFT SET THUS WHEN READINGS TAKEN: 4.5195

REMARKS:

|  |                                                                    |                                                                                                                    |                           |                                   |              |
|--|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------------------------|--------------|
|  | Reviewed by TFA: Matthew Ryan<br>Disposition Required: N/A<br>Ref# | Verified by QA: Matthew Ryan, o=Siemens Energy, email=matthew.ryan@siemens-energy.com<br>Date: 03/02/2021 11:04:00 | Reviewed by Eng:<br>Date: | HP TURBINE AXIAL BLADE CLEARANCES | Ref #.<br>23 |
|--|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------------------------|--------------|

[illegible]

|                                       |                               |                  |                             |                        |                                          |                                      |
|---------------------------------------|-------------------------------|------------------|-----------------------------|------------------------|------------------------------------------|--------------------------------------|
| CLIENT<br><b>NS Power</b>             | ORDER No.                     |                  | READINGS TAKEN BY: B. Smith | DATE:<br><br>Oct 23/25 | WP/ITP REF#<br><br>P-EFP-3083.01-0001-02 | IR SHEET REF.<br><br><b>HP.A.557</b> |
|                                       | LOCATION<br><b>Tufts Cove</b> |                  | PROOF READ BY:              |                        |                                          |                                      |
| STATUS WHEN INSPECTED<br><br>As Found | UNIT No. 1                    | INSTRUMENT TYPE: | CAL DUE DATE:               |                        |                                          | COMPONENT ID No.                     |
|                                       | M/C No.                       | INSTRUMENT No.   |                             |                        |                                          |                                      |



REMARKS

.

**SIEMENS**  
energy

Reviewed by TFA: Matthew Ryan  
 Verified by QA: Matthew Ryan, o-Siemens Energy, email=matthew.ryan@siemens-energy.com  
 Disposition Required: N  
 Ref#

Reviewed by Eng:

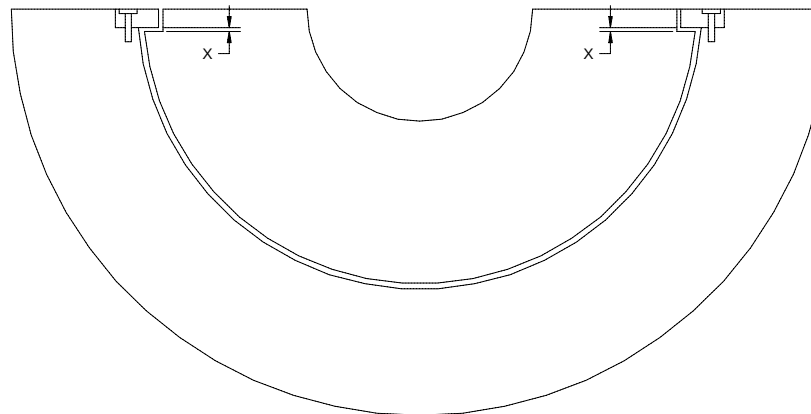
Date:

## HP GUIDE BLADE CARRIER AXIAL POSITIONING

Ref #.

25

|                                       |                |                  |                            |           |                       |                 |
|---------------------------------------|----------------|------------------|----------------------------|-----------|-----------------------|-----------------|
| CLIENT <b>NS Power</b>                | ORDER No.      |                  | READINGS TAKEN BY: J. Read | DATE:     | WP/ITP REF#           | IR SHEET REF.   |
| LOCATION <b>Tufts Cove</b>            | PROOF READ BY: |                  | SUPERVISED BY: A. Molnar   | Oct 25/25 | P-EFP-3083.01-0001-02 | <b>HP.A.517</b> |
| STATUS WHEN INSPECTED<br><br>As Found | UNIT No.       | INSTRUMENT TYPE: | CAL DUE DATE:              |           | COMPONENT ID No.      |                 |
|                                       | M/C No.        | INSTRUMENT No.   |                            |           |                       |                 |



| DIAPHRAGM LIFT AT 'X' |       |       |         |
|-----------------------|-------|-------|---------|
| STAGE                 | LHS   | RHS   | AVERAGE |
| 2                     | 0.050 | 0.029 |         |
| 3                     | 0.043 | 0.030 |         |
| 4                     | 0.043 | 0.044 |         |
| 5                     | 0.049 | 0.049 |         |
| 6                     | 0.032 | 0.019 |         |
| 7                     | 0.048 | 0.064 |         |
| 8                     | 0.038 | 0.032 |         |
| 9                     | 0.031 | 0.023 |         |
|                       |       |       |         |

REMARKS:

|  |                                                                         |                                                                            |                           |                                         |                     |
|--|-------------------------------------------------------------------------|----------------------------------------------------------------------------|---------------------------|-----------------------------------------|---------------------|
|  | Reviewed by TFA: <b>Matthew Ryan</b><br>Disposition Required <b>Y/N</b> | Verified by QA: <b>Matthew Ryan</b><br>Date: <b>2025.02.14 06:28:04:00</b> | Reviewed by Eng:<br>Date: | <b>HP TOP HALF DIAPHRAGM CLEARANCES</b> | Ref #.<br><b>27</b> |
|  |                                                                         |                                                                            |                           |                                         |                     |

|                                   |                |                    |               |                       |                  |
|-----------------------------------|----------------|--------------------|---------------|-----------------------|------------------|
| CLIENT NS Power                   | ORDER No.      | READINGS TAKEN BY: | DATE:         | WP/ITP REF#           | IR SHEET REF.    |
| LOCATION Tufts Cove               | PROOF READ BY: | SUPERVISED BY:     |               | P-EFP-3083.01-0001-02 | <b>BG.O.03a</b>  |
| STATUS WHEN INSPECTED<br>As Found | UNIT No. 1     | INSTRUMENT TYPE:   | CAL DUE DATE: |                       | COMPONENT ID No. |
|                                   | M/C No.        | INSTRUMENT No.     |               |                       |                  |

\_\_\_\_ SIDE      \_\_\_\_ SIDE

**BEARING TYPE:**

P PLAIN SEATED  
S SPHERICAL SEATED  
E ELLIPTICAL BORE  
C CYLINDRICAL BORE  
T THRUST BEARING  
B SINGLE BOUND  
BB DOUBLE BOUND

**NOTE:**  
1. Siemens to advise if original B reading is maintained during machining  
2. No new shims are to be added to the bearing pads without concurrence from Siemens.

| POSITION     |     | JOURNAL DIAMETER | READING 'A' | READING 'B' | VERTICAL DIAMETER | ____ SIDE | ____ SIDE | READING 'C' | READING 'D' | BEARING TYPE |
|--------------|-----|------------------|-------------|-------------|-------------------|-----------|-----------|-------------|-------------|--------------|
| BEARING No 1 | GOV | 6.988            |             |             | 6.999             |           |           | 7.004       | 7.000       |              |
|              | ALT | 6.988            |             |             | 6.998             |           |           | 7.000       | 7.0035      |              |
| BEARING No 2 | GOV | 9.984            |             |             | 10.006            |           |           | 10.000      | 10.0025     |              |
|              | ALT | 9.984            |             |             | 10.005            |           |           | 9.999       | 10.0015     |              |
| BEARING No   | GOV |                  |             |             |                   |           |           |             |             |              |
|              | ALT |                  |             |             |                   |           |           |             |             |              |
| BEARING No   | GOV |                  |             |             |                   |           |           |             |             |              |
|              | ALT |                  |             |             |                   |           |           |             |             |              |
| BEARING No   | GOV |                  |             |             |                   |           |           |             |             |              |
|              | ALT |                  |             |             |                   |           |           |             |             |              |
| BEARING No   | GOV |                  |             |             |                   |           |           |             |             |              |
|              | ALT |                  |             |             |                   |           |           |             |             |              |
| BEARING No   | GOV |                  |             |             |                   |           |           |             |             |              |
|              | ALT |                  |             |             |                   |           |           |             |             |              |
| BEARING No   | GOV |                  |             |             |                   |           |           |             |             |              |
|              | ALT |                  |             |             |                   |           |           |             |             |              |
| BEARING No   | GOV |                  |             |             |                   |           |           |             |             |              |
|              | ALT |                  |             |             |                   |           |           |             |             |              |

**NOTE: TYPE OF BEARING TO BE INDICATED WITH REFERENCE LETTER (S)**

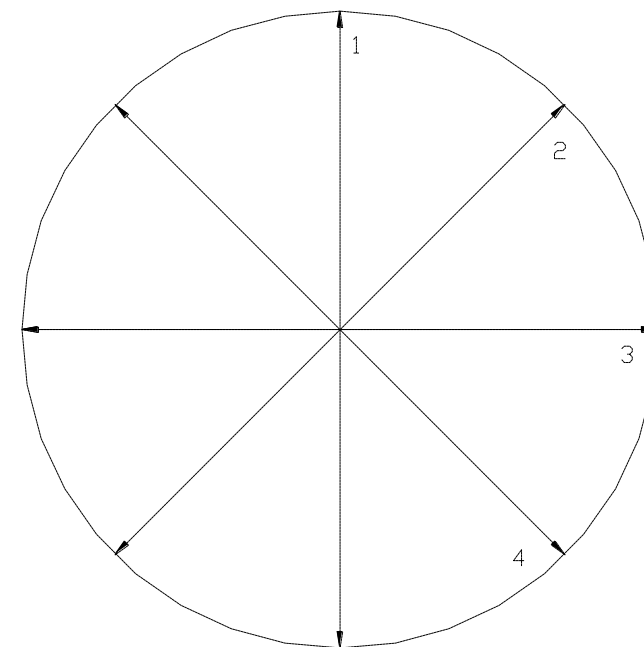
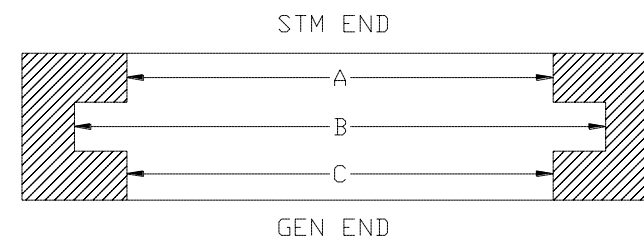
**REMARKS :**

|  |                                                                    |                                                                                                           |                           |                       |                  |
|--|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------|-----------------------|------------------|
|  | Reviewed by TFA: Matthew Ryan<br>Disposition Required: N/A<br>Ref# | Verified by QA: Matthew Ryan, o-Siemens Energy, email=matthew.ryan@siemens-energy.com<br>Date: 02/11/2024 | Reviewed by Eng:<br>Date: | BEARING BORE READINGS | Ref #.<br><br>28 |
|--|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------|-----------------------|------------------|

|                                   |                |                  |                            |           |                    |                 |
|-----------------------------------|----------------|------------------|----------------------------|-----------|--------------------|-----------------|
| CLIENT NS Power                   | ORDER No.      |                  | READINGS TAKEN BY: Brad S. | DATE:     | WP/ITP REF#        | IR SHEET REF.   |
| LOCATION Tufts Cove               | PROOF READ BY: |                  | SUPERVISED BY: A. Molnar   | Nov 01/25 | P-EFP-3083.0001.02 | <b>GL.O.508</b> |
| STATUS WHEN INSPECTED<br>As Found | UNIT No. 1     | INSTRUMENT TYPE: | CAL DUE DATE:              |           | COMPONENT ID No.   |                 |
|                                   | M/C No.        | INSTRUMENT No.   |                            |           |                    |                 |

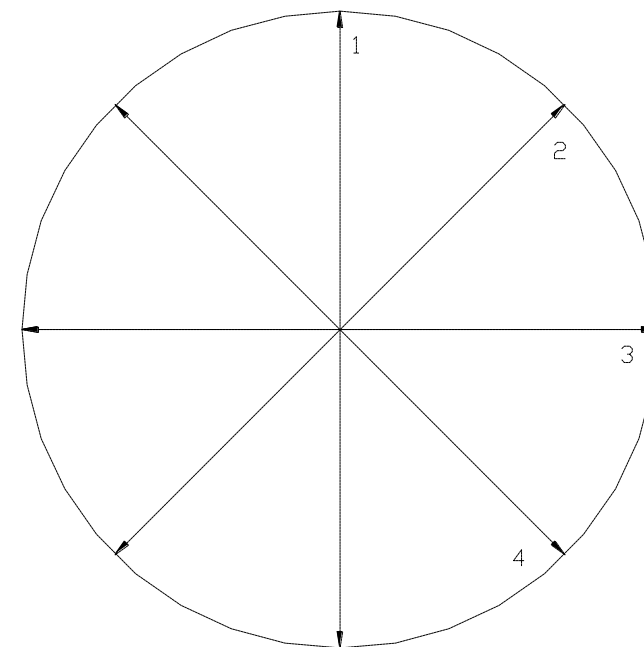
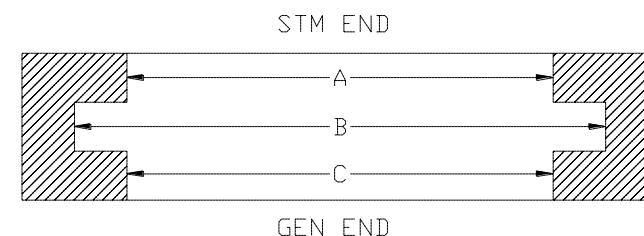
| POSITION | GLAND NUMBER  |        |        |               |   |   |
|----------|---------------|--------|--------|---------------|---|---|
|          | INNER HOUSING |        |        | OUTER HOUSING |   |   |
|          | A             | B      | C      | A             | B | C |
| 1        | 12.931        | 14.043 | 12.921 |               |   |   |
| 2        | 12.925        | 14.047 | 12.925 |               |   |   |
| 3        |               |        |        |               |   |   |
| 4        | 12.925        | 14.040 | 12.925 |               |   |   |



|  |                               |                              |                  |                                                          |                                |
|--|-------------------------------|------------------------------|------------------|----------------------------------------------------------|--------------------------------|
|  | Reviewed by TFA: Matthew Ryan | Verified by QA: Matthew Ryan | Reviewed by Eng: | <b>GLAND No.</b><br><br><b>HOUSING DISTORTION CHECKS</b> | <b>Ref #.</b><br><br><b>32</b> |
|  | Disposition Required: Y/N     | Date: 10/21/2025             | Date:            |                                                          |                                |

|                                   |                |                  |                            |               |                    |                  |
|-----------------------------------|----------------|------------------|----------------------------|---------------|--------------------|------------------|
| CLIENT NS Power                   | ORDER No.      |                  | READINGS TAKEN BY: Brad S. | DATE:         | WP/ITP REF#        | IR SHEET REF.    |
| LOCATION Tufts Cove               | PROOF READ BY: |                  | SUPERVISED BY: A. Molnar   | Nov 01/25     | P-EFP-3083.0001.02 | <b>GL.O.508</b>  |
| STATUS WHEN INSPECTED<br>As Found | UNIT No. 1     | INSTRUMENT TYPE: |                            | CAL DUE DATE: |                    | COMPONENT ID No. |
|                                   | M/C No.        | INSTRUMENT No.   |                            |               |                    |                  |

| POSITION | GLAND NUMBER  |        |        |               |   |   |
|----------|---------------|--------|--------|---------------|---|---|
|          | INNER HOUSING |        |        | OUTER HOUSING |   |   |
|          | A             | B      | C      | A             | B | C |
| 1        | 13.301        | 13.307 | 13.319 |               |   |   |
| 2        | 13.302        | 13.313 | 13.307 |               |   |   |
| 3        |               |        |        |               |   |   |
| 4        | 13.297        | 13.301 | 13.289 |               |   |   |



|  |                               |                                                                                       |                  |                  |                                  |                            |
|--|-------------------------------|---------------------------------------------------------------------------------------|------------------|------------------|----------------------------------|----------------------------|
|  | Reviewed by TFA: Matthew Ryan | Verified by QA: Matthew Ryan, o-Siemens Energy, email-matthew.ryan@siemens-energy.com | Reviewed by Eng: | <b>GLAND No.</b> | <b>HOUSING DISTORTION CHECKS</b> | <b>Ref #.</b><br><b>33</b> |
|  | Disposition Required: Y/N     | Date: 2025/11/02 11:04:00                                                             | Date:            |                  |                                  |                            |

|                                       |                |                  |                                    |           |                       |                 |
|---------------------------------------|----------------|------------------|------------------------------------|-----------|-----------------------|-----------------|
| CLIENT <b>NS Power</b>                | ORDER No.      |                  | READINGS TAKEN BY: Jeremy M/Paul M | DATE:     | WP/ITP REF#           | IR SHEET REF.   |
| LOCATION <b>Tufts Cove</b>            | PROOF READ BY: |                  | SUPERVISED BY: A. Molnar           | Nov 15/25 | P-EFP-3083.01-0001-02 | <b>HP.A.06a</b> |
| STATUS WHEN INSPECTED<br><br>As Found | UNIT No. 1     | INSTRUMENT TYPE: | CAL DUE DATE:                      |           | COMPONENT ID No.      |                 |
|                                       | M/C No.        | INSTRUMENT No.   |                                    |           |                       |                 |

| POSITION | CONDITION OF INLET LHS PIPE BORE AND DIAMETERS RELATIVE TO PISTON RINGS |             |             |             |                |                |                |                |
|----------|-------------------------------------------------------------------------|-------------|-------------|-------------|----------------|----------------|----------------|----------------|
|          | AA SIDE TOP                                                             | BB SIDE TOP | CC SIDE TOP | DD SIDE TOP | AA SIDE BOTTOM | BB SIDE BOTTOM | CC SIDE BOTTOM | DD SIDE BOTTOM |
| 1        | 7.6180                                                                  | 7.6147      | 7.6165      | 7.6158      | 7.6194         | 7.6152         | 7.6169         | 7.6161         |
| 2        | 7.6209                                                                  | 7.6183      | 7.620       | 7.6223      | 7.6204         | 7.6171         | 7.619          | 7.6185         |
| 3        | 7.6219                                                                  | 7.6187      | 7.6218      | 7.6232      | 7.6219         | 7.6173         | 7.6181         | 7.6164         |
| 4        | 7.6195                                                                  | 7.619       | 7.6222      | 7.6213      | 7.619          | 7.6154         | 7.6147         | 7.6156         |
| 5        | 7.6188                                                                  | 7.6161      | 7.6211      | 7.6224      | 7.6176         | 7.6168         | 7.6169         | 7.6146         |
| 6        | 7.6160                                                                  | 7.6174      | 7.621       | 7.6231      | 7.618          | 7.6154         | 7.6138         | 7.6146         |

| POSITION | CONDITION OF INLET RHS PIPE BORE AND DIAMETERS RELATIVE TO PISTON RINGS |             |             |             |                |                |                |                |
|----------|-------------------------------------------------------------------------|-------------|-------------|-------------|----------------|----------------|----------------|----------------|
|          | AA SIDE TOP                                                             | BB SIDE TOP | CC SIDE TOP | DD SIDE TOP | AA SIDE BOTTOM | BB SIDE BOTTOM | CC SIDE BOTTOM | DD SIDE BOTTOM |
| 1        | 7.6116                                                                  | 7.6113      | 7.6113      | 7.6114      | 7.6216         | 7.6250         | 7.6216         | 7.6203         |
| 2        | 7.6135                                                                  | 7.6156      | 7.6144      | 7.6138      | 7.6247         | 7.6274         | 7.6241         | 7.6234         |
| 3        | 7.6158                                                                  | 7.6153      | 7.6142      | 7.618       | 7.6257         | 7.6264         | 7.6225         | 7.6213         |
| 4        | 7.6168                                                                  | 7.6165      | 7.6145      | 7.6187      | 7.6235         | 7.6247         | 7.6218         | 7.6218         |
| 5        | 7.620                                                                   | 7.6174      | 7.6152      | 7.6173      | 7.6230         | 7.6239         | 7.6210         | 7.6203         |
| 6        | 7.6207                                                                  | 7.6198      | 7.615       | 7.618       | 7.6224         | 7.6227         | 7.6195         | 7.6190         |

REMARKS :

|                                                                                     |                                                                                |                                              |                           |                                      |                         |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|----------------------------------------------|---------------------------|--------------------------------------|-------------------------|
|  | Reviewed by TFA: <b>Matthew Ryan</b><br>Disposition Required <b>YN</b><br>Ref# | Verified by QA: <b>Matthew Ryan</b><br>Date: | Reviewed by Eng:<br>Date: | <b>HP STEAM INLET PIPE CONDITION</b> | Ref #.<br><br><b>34</b> |
|                                                                                     |                                                                                |                                              |                           |                                      |                         |

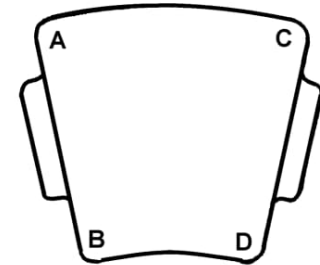
|                                          |            |                  |                    |               |                       |                  |
|------------------------------------------|------------|------------------|--------------------|---------------|-----------------------|------------------|
| CLIENT                                   | NS Power   | ORDER No.        | READINGS TAKEN BY: | DATE:         | WP/ITP REF#           | IR SHEET REF.    |
| LOCATION                                 | Tufts Cove | PROOF READY BY:  | SUPERVISED BY:     |               | P-EFP-3083.01-0001-02 | <b>BG.O.04a</b>  |
| STATUS WHEN INSPECTED<br><b>As Found</b> | UNIT No. 1 | INSTRUMENT TYPE: |                    | CAL DUE DATE: |                       | COMPONENT ID No. |
|                                          | M/C No.    | INSTRUMENT No.   |                    |               |                       |                  |

| WORKING SIDE UPPER HALF |       |       |       |       | WORKING SIDE LOWER HALF |       |       |       |       |
|-------------------------|-------|-------|-------|-------|-------------------------|-------|-------|-------|-------|
| PAD No                  | A     | B     | C     | D     | PAD No                  | A     | B     | C     | D     |
| 1                       | 0.648 | 0.648 | 0.649 | 0.649 | 14                      | 0.648 | 0.648 | 0.647 | 0.647 |
| 2                       | 0.646 | 0.648 | 0.646 | 0.646 | 15                      | 0.650 | 0.646 | 0.655 | 0.653 |
| 3                       | 0.646 | 0.648 | 0.646 | 0.647 | 16                      | 0.647 | 0.646 | 0.647 | 0.646 |
| 4                       | 0.646 | 0.647 | 0.647 | 0.647 | 17                      | 0.648 | 0.647 | 0.647 | 0.646 |
| 5                       | 0.646 | 0.648 | 0.647 | 0.647 | 18                      | 0.648 | 0.646 | 0.647 | 0.646 |
| 6                       | 0.648 | 0.648 | 0.647 | 0.647 | 19                      | 0.647 | 0.645 | 0.646 | 0.646 |
| 7                       | 0.647 | 0.648 | 0.648 | 0.648 | 20                      | 0.647 | 0.646 | 0.645 | 0.647 |
| 8                       | 0.648 | 0.648 | 0.647 | 0.647 | 21                      | 0.648 | 0.646 | 0.647 | 0.646 |
| 9                       | 0.647 | 0.647 | 0.647 | 0.647 | 22                      | 0.649 | 0.647 | 0.647 | 0.647 |
| 10                      | 0.648 | 0.648 | 0.647 | 0.647 | 23                      | 0.646 | 0.644 | 0.649 | 0.648 |
| 11                      | 0.648 | 0.649 | 0.647 | 0.647 | 24                      | 0.648 | 0.647 | 0.648 | 0.647 |
| 12                      | 0.648 | 0.649 | 0.649 | 0.648 | 25                      | 0.647 | 0.645 | 0.646 | 0.645 |
| 13                      | 0.648 | 0.648 | 0.648 | 0.647 | 26                      | 0.648 | 0.646 | 0.647 | 0.646 |

REMARKS:

27 0.648 0.645 0.647 0.646  
 28 0.648 0.646 0.647 0.646

Looking at white metal bearing surface. Thickness to be measured at all 4 corners.



| LINER THICKNESS |  |
|-----------------|--|
| TOP             |  |
| BOT             |  |

| SHIM SIZES |  |
|------------|--|
| TOP        |  |
| BOT        |  |

**SIEMENS**  
energy

Reviewed by TFA: Matthew Ryan  
 Disposition Required Y/N  
 Ref #.

Verified by QA: Matthew Ryan  
 Date:

Reviewed by Eng:  
 Date:

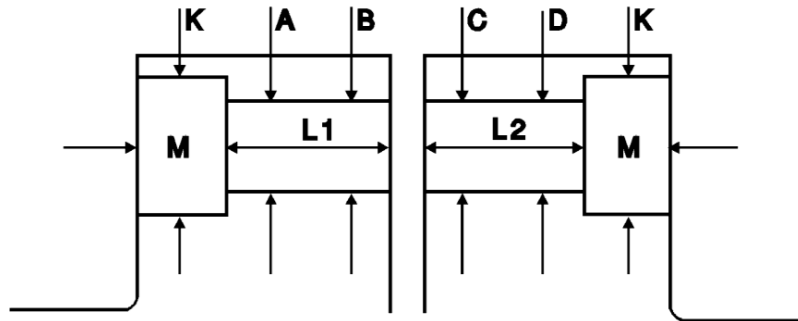
**WORKING THRUST PAD THICKNESS**

Ref #.

35

Sheet of

|                                          |                |                  |                             |                    |                                      |                                  |
|------------------------------------------|----------------|------------------|-----------------------------|--------------------|--------------------------------------|----------------------------------|
| CLIENT    NS Power                       | ORDER No.      |                  | READINGS TAKEN BY:D. Palmer | DATE:<br>Nov 14/25 | WP/ITP REF#<br>P-EFP-3083.01-0001-02 | IR SHEET REF.<br><b>AL.O.06a</b> |
|                                          | PROOF READ BY: |                  | SUPERVISED BY:A. Molnar     |                    |                                      |                                  |
| LOCATION   Tufts Cove                    | UNIT No.   1   | INSTRUMENT TYPE: |                             | CAL DUE DATE:      |                                      | COMPONENT ID No.                 |
| STATUS WHEN INSPECTED<br><b>As Found</b> | M/C No.        | INSTRUMENT No.   |                             |                    |                                      |                                  |



|                       |           |          |
|-----------------------|-----------|----------|
| <b>_____ COUPLING</b> |           |          |
| <b>K</b>              | <b>L1</b> | <b>M</b> |
|                       |           |          |
| <b>HOLES BUSHED</b>   |           |          |
| <b>NUMBERING</b>      |           |          |

|                |    |   |
|----------------|----|---|
| _____ COUPLING |    |   |
| K              | L2 | M |
|                |    |   |
| HOLES BUSHED   |    |   |
| NUMBERING      |    |   |

|                       |  |
|-----------------------|--|
| PATCH PLATE THICKNESS |  |
|-----------------------|--|

**NOTE: Bolt hole numbering is defined as clockwise (CW) and/ or anti clockwise (ACW) looking from TE towards GE. Standard practice is to number bolt holes anti clockwise (ACW)**

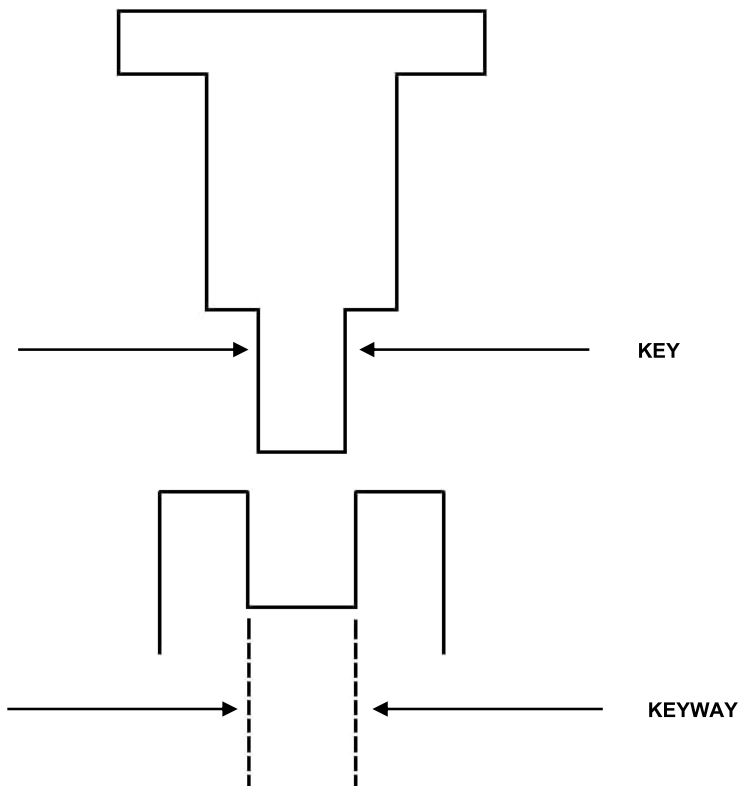
REMARKS:

[illegible]

**ALL READINGS IN INCHES**

|                                                                                     |                                                                                                                 |                 |                  |                                           |        |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------|------------------|-------------------------------------------|--------|
|  | Reviewed by TFA:<br>Matthew Ryan<br>cr=Matthew Ryan, o=Siemens Energy,<br>email=matthew.ryan@siemens-energy.com | Verified by QA: | Reviewed by Eng: | <b>COUPLING BOLT &amp; HOLE DIAMETERS</b> | Ref #. |
| Disposition Required Y/N                                                            | Date:                                                                                                           | Date:           | Date:            |                                           | 36     |

|                              |                       |                         |                                     |              |                       |                         |
|------------------------------|-----------------------|-------------------------|-------------------------------------|--------------|-----------------------|-------------------------|
| <b>CLIENT</b> NS Power       | <b>ORDER No.</b>      |                         | <b>READINGS TAKEN BY:</b> D. Martin | <b>DATE:</b> | <b>WP/ITP REF#</b>    | <b>IR SHEET REF.</b>    |
| <b>LOCATION</b> Tufts Cove   | <b>PROOF READ BY:</b> |                         | <b>SUPERVISED BY:</b> A. Molnar     | Nov 13/25    | P-EFP-3083.01-0001-02 | <b>HP.D.03c</b>         |
| <b>STATUS WHEN INSPECTED</b> | <b>UNIT No. 1</b>     | <b>INSTRUMENT TYPE:</b> |                                     |              | <b>CAL DUE DATE:</b>  | <b>COMPONENT ID No.</b> |
| As Left                      | <b>M/C No.</b>        | <b>INSTRUMENT No.</b>   |                                     |              |                       |                         |



| POSITION | KEY   | KEYWAY | KEY   | KEYWAY |
|----------|-------|--------|-------|--------|
| TOP      | 2.484 | 2.498  | 2.742 | 2.758  |
| BOTTOM   | 2.483 | 2.498  | 2.740 | 2.753  |

REMARKS:

|  |                                                                          |                                              |                                  |                                          |                     |
|--|--------------------------------------------------------------------------|----------------------------------------------|----------------------------------|------------------------------------------|---------------------|
|  | <b>Reviewed by TFA:</b> Matthew Ryan<br>Disposition Required Y/N<br>Ref# | <b>Verified by QA:</b> Matthew Ryan<br>Date: | <b>Reviewed by Eng:</b><br>Date: | <b>HP TOP &amp; BOTTOM CYLINDER KEYS</b> | <b>Ref #.</b><br>39 |
|  |                                                                          |                                              |                                  |                                          |                     |

|                       |                   |                  |                    |                  |                              |                |
|-----------------------|-------------------|------------------|--------------------|------------------|------------------------------|----------------|
| CLIENT                | <b>NS Power</b>   | ORDER No.        | READINGS TAKEN BY: | DATE:            | WP/ITP REF#                  | IR SHEET REF.  |
| LOCATION              | <b>Tufts Cove</b> | PROOF READY BY:  | SUPERVISED BY:     | Nov 15/25        | <b>P-EFP-3083.01-0001-02</b> | <b>MI.O.01</b> |
| STATUS WHEN INSPECTED | UNIT No. <b>1</b> | INSTRUMENT TYPE: | CAL DUE DATE:      | COMPONENT ID No. |                              |                |
| <b>As Left</b>        | M/C No.           | INSTRUMENT No.   |                    |                  |                              |                |

Recorded cover gaps bolted & unbolted, removed outer and inner covers. Axial and radial clearances were recorded and evaluated; seals were visually inspected, no rubbing and no mushrooming noted. Seals #17-25 are in rough shape, should be replaced during the next available outage. Recommendation for the nozzles to be inspected and repaired during the next available outage.

Prior to NDE inspections, the rotor and diaphragms were grit blasted. Passmore conducted NDE inspection of the diaphragms, rotor, and bearings. Nothing of note was found on the rotor or the bearings; indications were found on the diaphragm airfoils as well as two of the lower half keyways. The airfoils were blended by a Siemens energy tech per PCM response and the two keyways were blended by an NSP millwright.

The HP rotor was balanced in the slow speed balance machine by a Siemens Energy technician. Siemens Energy sent a laser tech to evaluate the distortion of the HP inner cylinder, Reinhart conducted a boresonics inspection of the HP rotor.

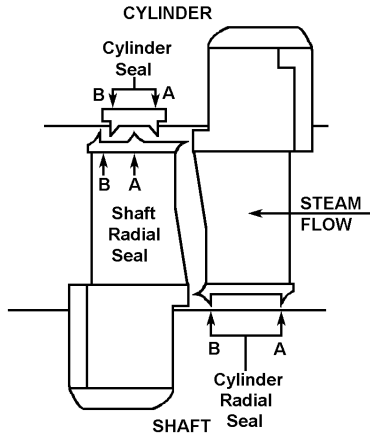
After measuring the bottom and side radial clearances, the #13 gland seal was scraped 0.010" and the left hand #1-8 gland seals were scraped 0.005" to increase the clearance between the rotor and the seals.

PCM 1-25-018826 Future Diaphragm Adjustments - recommends setting the diaphragms back to design clearances with respect to metronor data. My evaluation based on the AF and AL data, site will be unlikely to return the diaphragms to design conditions based on the deformation and wear on the seals.

REMARKS:

|                                                                                     |                                                                                                                                                                           |                                                                                                   |                  |                           |                           |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------|---------------------------|---------------------------|
|  | Reviewed by TFA:                                                                                                                                                          | Verified by QA:                                                                                   | Reviewed by Eng: | <h1>HP Summary Sheet</h1> | Ref #.                    |
|                                                                                     | <b>Matthew Ryan</b><br><small>Matthew Ryan<br/>on=Matthew Ryan, o=Siemens Energy,<br/>email=matthew.ryan@siemens-energy.com</small><br>Disposition Required Y/N<br>Ref #. | <small>Matthew Ryan, o=Siemens Energy,<br/>email=matthew.ryan@siemens-energy.com</small><br>Date: | Date:            |                           | <b>49</b><br><br>Sheet of |

|                            |                |                             |               |                       |                  |
|----------------------------|----------------|-----------------------------|---------------|-----------------------|------------------|
| CLIENT <b>NS Power</b>     | ORDER No.      | READINGS TAKEN BY: B. Smith | DATE:         | WP/ITP REF#           | IR SHEET REF.    |
| LOCATION <b>Tufts Cove</b> | PROOF READ BY: | SUPERVISED BY: A. Molnar    | Nov 20/25     | P-EFP-3083.01-0001-02 | <b>HP.C.02</b>   |
| STATUS WHEN INSPECTED      | UNIT No. 1     | INSTRUMENT TYPE:            | CAL DUE DATE: |                       | COMPONENT ID No. |
| As Left                    | M/C No.        | INSTRUMENT No.              |               |                       |                  |



SHAFT SET THUS WHEN READINGS TAKEN:

REMARKS :

| ROW No               |          | 1 | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    |      |  |  |  |  |  |  |  |  |  |
|----------------------|----------|---|------|------|------|------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|
| CYLINDER RADIAL SEAL | ___ SIDE | A |      |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |
|                      |          | B |      |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |
|                      | ___ SIDE | A |      |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |
|                      |          | B |      |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |
|                      | TOP      | A |      |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |
|                      |          | B |      |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |
| SHAFT RADIAL SEAL    | ___ SIDE | A |      |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |
|                      |          | B |      |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |
|                      | ___ SIDE | A |      |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |
|                      |          | B |      |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |
|                      | TOP      | A |      |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |
|                      |          | B |      |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |
| CYLINDER SEAL        | X SIDE   | A | .055 | .082 | .088 | .072 | .076 | .084 | .089 | .050 | .049 |  |  |  |  |  |  |  |  |  |
|                      |          | B | .073 |      |      |      |      |      |      | .086 |      |  |  |  |  |  |  |  |  |  |
|                      | Y SIDE   | A | .047 | .069 | .068 | .085 | .092 | .080 | .089 | .056 | .039 |  |  |  |  |  |  |  |  |  |
|                      |          | B | .089 |      |      |      |      |      |      | .069 |      |  |  |  |  |  |  |  |  |  |
|                      | TOP      | A |      |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |
|                      |          | B |      |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |
|                      | BOTTOM   | A | .110 | .105 | .105 | .108 | .103 | .083 | .103 | .083 | .092 |  |  |  |  |  |  |  |  |  |
|                      |          | B | .110 |      |      |      |      |      |      | .100 |      |  |  |  |  |  |  |  |  |  |

**SIEMENS**  
energy

Reviewed by TFA: Matthew Ryan  
on: Matthew Ryan, o-Siemens Energy,  
email: matthew.ryan@siemens-energy.com  
Date: 10/21/2021 11:04:00  
Disposition Required IN Ref#

Verified by QA:  
Date:

Reviewed by Eng:  
Date:

**HP TURBINE RADIAL BLADE CLEARANCES**

Ref #.  
**51**

| CLIENT <b>NS Power</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | ORDER No.                                                  |                  | READINGS TAKEN BY:   Brad S.                               |  | DATE:            |               | WP/ITP REF#                   |                  | IR SHEET REF.   |  |              |        |        |       |       |       |        |        |        |        |       |      |       |       |      |       |      |       |      |       |       |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------|------------------|------------------------------------------------------------|--|------------------|---------------|-------------------------------|------------------|-----------------|--|--------------|--------|--------|-------|-------|-------|--------|--------|--------|--------|-------|------|-------|-------|------|-------|------|-------|------|-------|-------|---|-------|--|---|-------|--|-------|--|-------|--|---|--|--|--|---|--|--|--|--|--|--|---|---|-------|--|---|-------|--|-------|--|-------|--|---|--|--|--|---|--|--|--|--|--|--|---|---|-------|--|---|-------|--|-------|--|-------|--|---|--|--|--|---|--|--|--|--|--|--|---|---|-------|--|---|-------|--|-------|--|-------|--|---|--|--|--|---|--|--|--|--|--|--|---|---|-------|--|---|-------|--|-------|--|-------|--|---|--|--|--|---|--|--|--|--|--|--|---|---|-------|--|---|-------|--|-------|--|-------|--|---|--|--|--|---|--|--|--|--|--|--|---|---|-------|--|---|-------|--|-------|--|-------|--|---|--|--|--|---|--|--|--|--|--|--|---|---|-------|--|---|-------|--|-------|--|-------|--|---|--|--|--|---|--|--|--|--|--|--|---|--|--|--|---|--|--|--|--|--|--|---|--|--|--|---|--|--|--|--|--|--|---|--|--|--|---|--|--|--|--|--|--|---|--|--|--|---|--|--|--|--|--|--|---|--|--|--|---|--|--|--|--|--|--|---|--|--|--|---|--|--|--|--|--|--|---|--|--|--|---|--|--|--|--|--|--|---|--|--|--|---|--|--|--|--|--|--|---|--|--|--|---|--|--|--|--|--|--|---|--|--|--|---|--|--|--|--|--|--|---|--|--|--|---|--|--|--|--|--|--|---|
| LOCATION <b>Tufts Cove</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | PROOF READ BY:                                             |                  | SUPERVISED BY:                 A.   Molnar                 |  | Nov 20/25        |               | P-EFP-3083.01-0001-02         |                  | <b>HP.C.519</b> |  |              |        |        |       |       |       |        |        |        |        |       |      |       |       |      |       |      |       |      |       |       |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   | 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| STATUS WHEN INSPECTED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | UNIT No.   1                                               | INSTRUMENT TYPE: |                                                            |  |                  | CAL DUE DATE: |                               | COMPONENT ID No. |                 |  |              |        |        |       |       |       |        |        |        |        |       |      |       |       |      |       |      |       |      |       |       |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   | 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| As Left                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | M/C No.                                                    | INSTRUMENT No.   |                                                            |  |                  |               |                               |                  |                 |  |              |        |        |       |       |       |        |        |        |        |       |      |       |       |      |       |      |       |      |       |       |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   | 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| <div style="display: flex; align-items: center;"><div style="flex: 1; padding-right: 10px;">SHAFT POSITION:<br/><br/><div style="text-align: center;"><p>Direction of Flow ↑</p></div></div><table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"><thead><tr><th rowspan="2"></th><th colspan="3">X SIDE</th><th colspan="2">TOP</th><th colspan="2">BOTTOM</th><th colspan="3">Y SIDE</th></tr><tr><th>LONG</th><th>SHORT</th><th>A / B</th><th>LONG</th><th>SHORT</th><th>LONG</th><th>SHORT</th><th>LONG</th><th>SHORT</th><th>A / B</th></tr></thead><tbody><tr><td>2</td><td>0.021</td><td></td><td>/</td><td>0.036</td><td></td><td>0.045</td><td></td><td>0.026</td><td></td><td>/</td></tr><tr><td></td><td></td><td></td><td>/</td><td></td><td></td><td></td><td></td><td></td><td></td><td>/</td></tr><tr><td>3</td><td>0.022</td><td></td><td>/</td><td>0.037</td><td></td><td>0.045</td><td></td><td>0.033</td><td></td><td>/</td></tr><tr><td></td><td></td><td></td><td>/</td><td></td><td></td><td></td><td></td><td></td><td></td><td>/</td></tr><tr><td>4</td><td>0.031</td><td></td><td>/</td><td>0.059</td><td></td><td>0.043</td><td></td><td>0.048</td><td></td><td>/</td></tr><tr><td></td><td></td><td></td><td>/</td><td></td><td></td><td></td><td></td><td></td><td></td><td>/</td></tr><tr><td>5</td><td>0.023</td><td></td><td>/</td><td>0.137</td><td></td><td>0.043</td><td></td><td>0.038</td><td></td><td>/</td></tr><tr><td></td><td></td><td></td><td>/</td><td></td><td></td><td></td><td></td><td></td><td></td><td>/</td></tr><tr><td>6</td><td>0.042</td><td></td><td>/</td><td>0.097</td><td></td><td>0.040</td><td></td><td>0.030</td><td></td><td>/</td></tr><tr><td></td><td></td><td></td><td>/</td><td></td><td></td><td></td><td></td><td></td><td></td><td>/</td></tr><tr><td>7</td><td>0.024</td><td></td><td>/</td><td>0.108</td><td></td><td>0.041</td><td></td><td>0.040</td><td></td><td>/</td></tr><tr><td></td><td></td><td></td><td>/</td><td></td><td></td><td></td><td></td><td></td><td></td><td>/</td></tr><tr><td>8</td><td>0.024</td><td></td><td>/</td><td>0.074</td><td></td><td>0.042</td><td></td><td>0.021</td><td></td><td>/</td></tr><tr><td></td><td></td><td></td><td>/</td><td></td><td></td><td></td><td></td><td></td><td></td><td>/</td></tr><tr><td>9</td><td>0.019</td><td></td><td>/</td><td>0.061</td><td></td><td>0.038</td><td></td><td>0.018</td><td></td><td>/</td></tr><tr><td></td><td></td><td></td><td>/</td><td></td><td></td><td></td><td></td><td></td><td></td><td>/</td></tr><tr><td></td><td></td><td></td><td>/</td><td></td><td></td><td></td><td></td><td></td><td></td><td>/</td></tr><tr><td></td><td></td><td></td><td>/</td><td></td><td></td><td></td><td></td><td></td><td></td><td>/</td></tr><tr><td></td><td></td><td></td><td>/</td><td></td><td></td><td></td><td></td><td></td><td></td><td>/</td></tr><tr><td></td><td></td><td></td><td>/</td><td></td><td></td><td></td><td></td><td></td><td></td><td>/</td></tr><tr><td></td><td></td><td></td><td>/</td><td></td><td></td><td></td><td></td><td></td><td></td><td>/</td></tr><tr><td></td><td></td><td></td><td>/</td><td></td><td></td><td></td><td></td><td></td><td></td><td>/</td></tr><tr><td></td><td></td><td></td><td>/</td><td></td><td></td><td></td><td></td><td></td><td></td><td>/</td></tr><tr><td></td><td></td><td></td><td>/</td><td></td><td></td><td></td><td></td><td></td><td></td><td>/</td></tr><tr><td></td><td></td><td></td><td>/</td><td></td><td></td><td></td><td></td><td></td><td></td><td>/</td></tr><tr><td></td><td></td><td></td><td>/</td><td></td><td></td><td></td><td></td><td></td><td></td><td>/</td></tr><tr><td></td><td></td><td></td><td>/</td><td></td><td></td><td></td><td></td><td></td><td></td><td>/</td></tr></tbody></table></div> |  |                                                            |                  |                                                            |  |                  |               |                               |                  |                 |  |              | X SIDE |        |       | TOP   |       | BOTTOM |        | Y SIDE |        |       | LONG | SHORT | A / B | LONG | SHORT | LONG | SHORT | LONG | SHORT | A / B | 2 | 0.021 |  | / | 0.036 |  | 0.045 |  | 0.026 |  | / |  |  |  | / |  |  |  |  |  |  | / | 3 | 0.022 |  | / | 0.037 |  | 0.045 |  | 0.033 |  | / |  |  |  | / |  |  |  |  |  |  | / | 4 | 0.031 |  | / | 0.059 |  | 0.043 |  | 0.048 |  | / |  |  |  | / |  |  |  |  |  |  | / | 5 | 0.023 |  | / | 0.137 |  | 0.043 |  | 0.038 |  | / |  |  |  | / |  |  |  |  |  |  | / | 6 | 0.042 |  | / | 0.097 |  | 0.040 |  | 0.030 |  | / |  |  |  | / |  |  |  |  |  |  | / | 7 | 0.024 |  | / | 0.108 |  | 0.041 |  | 0.040 |  | / |  |  |  | / |  |  |  |  |  |  | / | 8 | 0.024 |  | / | 0.074 |  | 0.042 |  | 0.021 |  | / |  |  |  | / |  |  |  |  |  |  | / | 9 | 0.019 |  | / | 0.061 |  | 0.038 |  | 0.018 |  | / |  |  |  | / |  |  |  |  |  |  | / |  |  |  | / |  |  |  |  |  |  | / |  |  |  | / |  |  |  |  |  |  | / |  |  |  | / |  |  |  |  |  |  | / |  |  |  | / |  |  |  |  |  |  | / |  |  |  | / |  |  |  |  |  |  | / |  |  |  | / |  |  |  |  |  |  | / |  |  |  | / |  |  |  |  |  |  | / |  |  |  | / |  |  |  |  |  |  | / |  |  |  | / |  |  |  |  |  |  | / |  |  |  | / |  |  |  |  |  |  | / |  |  |  | / |  |  |  |  |  |  | / |
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    |        | X SIDE |       |       | TOP   |        | BOTTOM |        | Y SIDE |       |      |       |       |      |       |      |       |      |       |       |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   | 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    |        | SHORT  | A / B | LONG  | SHORT | LONG   | SHORT  | LONG   | SHORT  | A / B |      |       |       |      |       |      |       |      |       |       |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   | 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    | 0.021  |        | /     | 0.036 |       | 0.045  |        | 0.026  |        | /     |      |       |       |      |       |      |       |      |       |       |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   | 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    | 0.022  |        | /     | 0.037 |       | 0.045  |        | 0.033  |        | /     |      |       |       |      |       |      |       |      |       |       |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   | 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    | 0.031  |        | /     | 0.059 |       | 0.043  |        | 0.048  |        | /     |      |       |       |      |       |      |       |      |       |       |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   | 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    | 0.023  |        | /     | 0.137 |       | 0.043  |        | 0.038  |        | /     |      |       |       |      |       |      |       |      |       |       |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   | 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    | 0.042  |        | /     | 0.097 |       | 0.040  |        | 0.030  |        | /     |      |       |       |      |       |      |       |      |       |       |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   | 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    | 0.024  |        | /     | 0.108 |       | 0.041  |        | 0.040  |        | /     |      |       |       |      |       |      |       |      |       |       |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   | 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    | 0.024  |        | /     | 0.074 |       | 0.042  |        | 0.021  |        | /     |      |       |       |      |       |      |       |      |       |       |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   | 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    | 0.019  |        | /     | 0.061 |       | 0.038  |        | 0.018  |        | /     |      |       |       |      |       |      |       |      |       |       |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | Reviewed by TFA: Matthew Ryan<br>Disposition Required Ref# |                  | Verified by QA: Matthew Ryan<br>Date: 03 Nov 2025 11:53:00 |  | Reviewed by Eng: |               | HP DIAPHRAGM RADIAL AND AXIAL |                  |                 |  | Ref #.<br>52 |        |        |       |       |       |        |        |        |        |       |      |       |       |      |       |      |       |      |       |       |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                                                            |                  |                                                            |  | Date:            |               |                               |                  |                 |  |              |        |        |       |       |       |        |        |        |        |       |      |       |       |      |       |      |       |      |       |       |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |   |       |  |   |       |  |       |  |       |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |  |  |  |   |  |  |  |  |  |  |   |

|                                         |                |                  |                             |  |               |                       |                  |
|-----------------------------------------|----------------|------------------|-----------------------------|--|---------------|-----------------------|------------------|
| CLIENT <b>NS Power</b>                  | ORDER No.      |                  | READINGS TAKEN BY: J. Reade |  | DATE:         | WP/ITP REF#           | IR SHEET REF.    |
| LOCATION <b>Tufts Cove</b>              | PROOF READ BY: |                  | SUPERVISED BY: A. Molnar    |  | Nov 25/25     | P-EFP-3083.01-0001-02 | <b>HP.A.529</b>  |
| STATUS WHEN INSPECTED<br><b>As Left</b> | UNIT No. 1     | INSTRUMENT TYPE: |                             |  | CAL DUE DATE: |                       | COMPONENT ID No. |
|                                         | M/C No.        | INSTRUMENT No.   |                             |  |               |                       |                  |

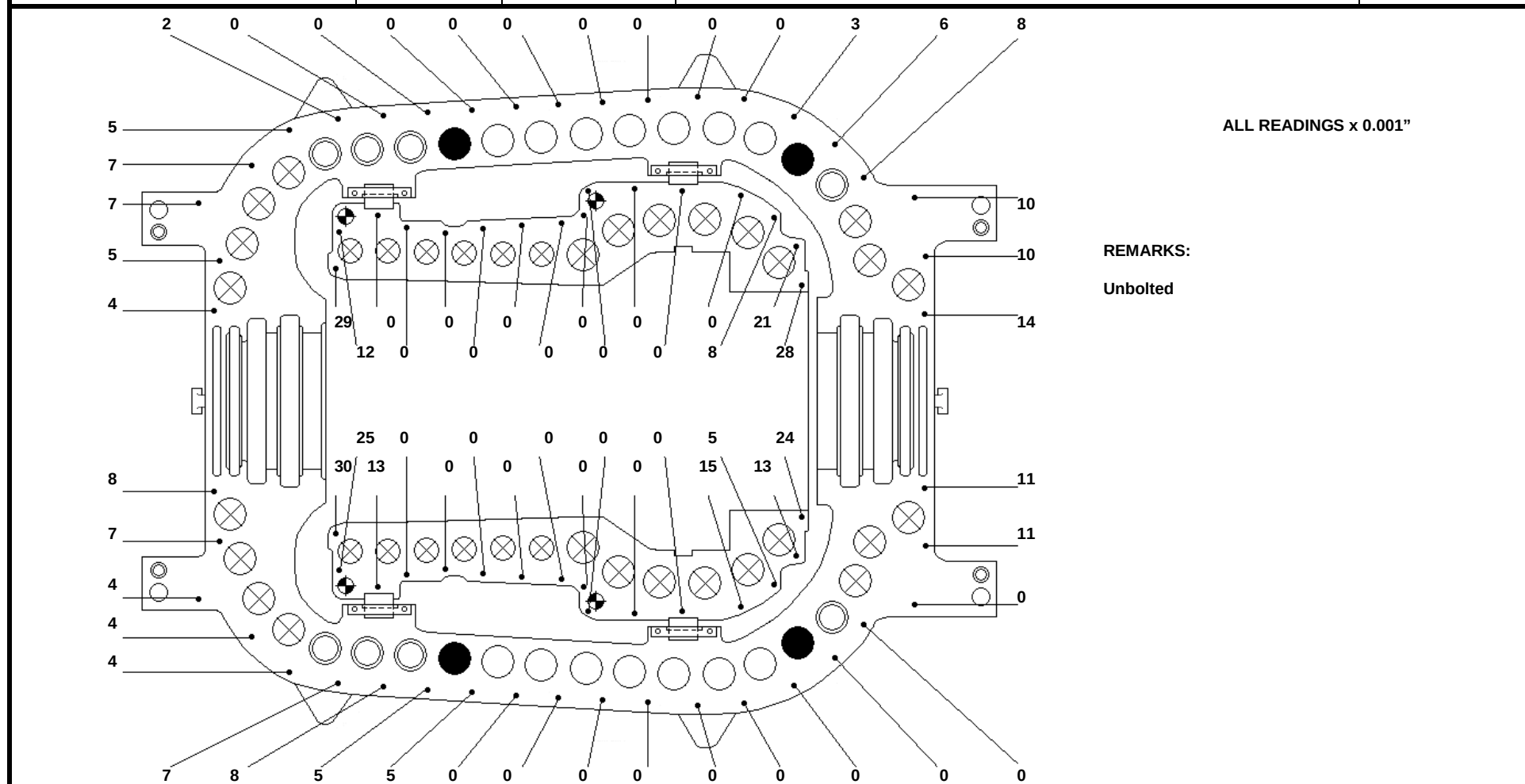
  

ALL READINGS x 0.001"

REMARKS:  
Bolted

|  |                                                                                 |                                              |                           |                                                            |                         |
|--|---------------------------------------------------------------------------------|----------------------------------------------|---------------------------|------------------------------------------------------------|-------------------------|
|  | Reviewed by TFA: <b>Matthew Ryan</b><br>Disposition Required: <b>YN</b><br>Ref# | Verified by QA: <b>Matthew Ryan</b><br>Date: | Reviewed by Eng:<br>Date: | <b>HP CYLINDER HORIZONTAL JOINT GAP CHECK (150MW TYPE)</b> | Ref #.<br><br><b>55</b> |
|--|---------------------------------------------------------------------------------|----------------------------------------------|---------------------------|------------------------------------------------------------|-------------------------|

|                                         |                |                  |                               |               |                       |                                  |
|-----------------------------------------|----------------|------------------|-------------------------------|---------------|-----------------------|----------------------------------|
| CLIENT<br><b>NS Power</b>               | ORDER No.      |                  | READINGS TAKEN BY: J. Macphee | DATE:         | WP/ITP REF#           | IR SHEET REF.<br><b>HP.A.529</b> |
|                                         | PROOF READ BY: |                  | SUPERVISED BY: A. Molnar      | Nov 25/25     | P-EFP-3083.01-0001-02 |                                  |
| LOCATION<br><b>Tufts Cove</b>           | UNIT No. 1     | INSTRUMENT TYPE: |                               | CAL DUE DATE: |                       | COMPONENT ID No.                 |
| STATUS WHEN INSPECTED<br><b>As Left</b> | M/C No.        | INSTRUMENT No.   |                               |               |                       |                                  |



|  |                                                                            |                                                                                                           |                           |                                                            |              |
|--|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------|------------------------------------------------------------|--------------|
|  | Reviewed by TFA: Matthew Ryan<br>Disposition Required: <b>Pass</b><br>Ref# | Verified by QA: Matthew Ryan, o=Siemens Energy, email=matthew.ryan@siemens-energy.com<br>Date: 02/11/2024 | Reviewed by Eng:<br>Date: | <b>HP CYLINDER HORIZONTAL JOINT GAP CHECK (150MW TYPE)</b> | Ref #.<br>55 |
|--|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------|------------------------------------------------------------|--------------|

|                                         |                |                              |                   |                                      |                                  |
|-----------------------------------------|----------------|------------------------------|-------------------|--------------------------------------|----------------------------------|
| CLIENT<br>NS Power                      | ORDER No.      | READINGS TAKEN BY: D. Martin | DATE:<br>Dec 9/25 | WP/ITP REF#<br>P-EFP-3083.01-0001-02 | IR SHEET REF.<br><b>AL.O.01a</b> |
| LOCATION<br>Tufts Cove                  | PROOF READ BY: | SUPERVISED BY:               |                   |                                      |                                  |
| STATUS WHEN INSPECTED<br><b>As Left</b> | UNIT No. 1     | INSTRUMENT TYPE:             | CAL DUE DATE:     |                                      | COMPONENT ID No.                 |
|                                         | M/C No.        | INSTRUMENT No.               |                   |                                      |                                  |

| BRG No. | BRIDGE GAUGE READINGS |           | SEMI HEIGHT |
|---------|-----------------------|-----------|-------------|
|         | SIDE READINGS WHEN    |           |             |
|         | TIPS AT X             | TIPS AT Y |             |
|         |                       |           |             |
|         |                       |           |             |

|                                                       |                           |
|-------------------------------------------------------|---------------------------|
| POSITIVE = OPEN AT TOP POSITIVE = OPEN 'X' SIDE       |                           |
| NEGATIVE = OPEN AT BOTTOM NEGATIVE = OPEN AT 'Y' SIDE |                           |
| VERTICAL PLANE                                        | HORIZONTAL PLANE          |
| $\frac{(A-B)+(C-D)}{2} =$                             | $\frac{(L-M)+(N-O)}{2} =$ |
| COUPLING FACE TRUTH OF SHAFT                          |                           |
| NOT TURNED IN OPERATION III                           |                           |
| VERTICAL PLANE                                        | HORIZONTAL PLANE          |
| $\frac{(A-B)-(E-F)}{2} =$                             | $\frac{(L-M)-(P-Q)}{2} =$ |
| COUPLING FACE TRUTH OF SHAFT                          |                           |
| TURNED IN OPERATION III                               |                           |
| VERTICAL PLANE                                        | HORIZONTAL PLANE          |
| $\frac{(E-F)-(C-D)}{2} =$                             | $\frac{(P-Q)-(N-O)}{2} =$ |

LEVEL READINGS

PEDESTAL:  
JOURNAL:  
  
PEDESTAL:

Reviewed by TFA: Matthew Ryan  
Verified by QA: Matthew Ryan, o=Siemens Energy, email=matthew.ryan@siemens-energy.com  
Disposition Required: N/A  
Ref#:

Reviewed by Eng:  
Date:

**COUPLING ALIGNMENT (SOLID)**

Ref #.  
**57**

# SIEMENS energy

## COUPLING ALIGNMENT - HP TO IP

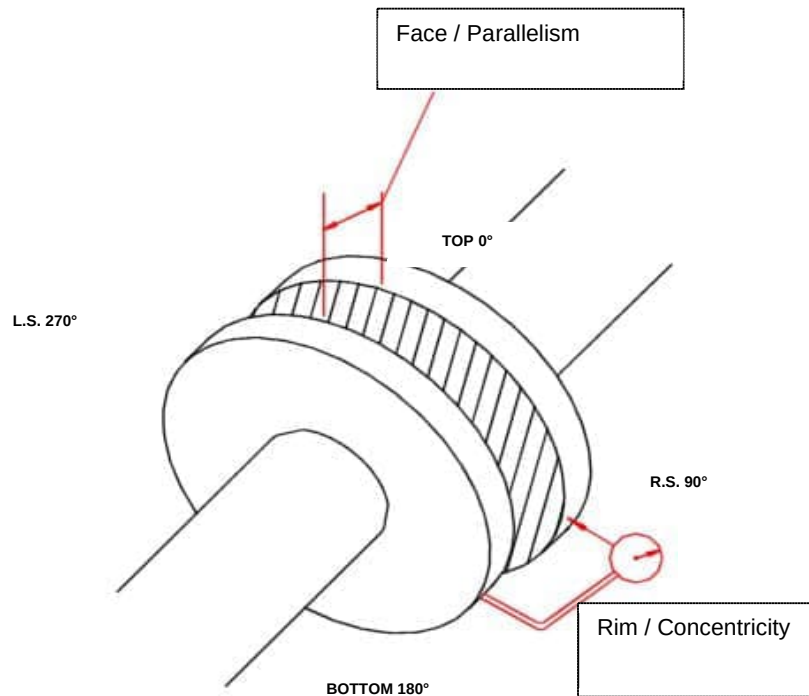
CUSTOMER: \_\_\_\_\_

JOB NO.: \_\_\_\_\_

UNIT SERIAL NO.: \_\_\_\_\_

UNIT ID: \_\_\_\_\_

 \_\_\_\_\_ DISASSEMBLY   X   ASSEMBLY

 COUPLING LOCATION \_\_\_\_\_  
 INDICATOR ATTACHED TO   HP    
 BUTTON RIDING ON   IP  


|                   | PARALLEL |       |       |       |         | RIM<br>CONCENTRICITY |                      |
|-------------------|----------|-------|-------|-------|---------|----------------------|----------------------|
|                   | 0°       | 90°   | 180°  | 270°  | AVERAGE | 1 <sup>st</sup> Pass | 2 <sup>nd</sup> Pass |
| <b>TOP</b>        | .0365    | .0415 | .0392 | .0399 | .0393   | .0251                |                      |
| <b>BOTTOM</b>     | .0360    | .0434 | .0421 | .0421 | .0409   | .0244                |                      |
| <b>RIGHT SIDE</b> | .0350    | .0419 | .0398 | .0400 | .0392   | .0235                |                      |
| <b>LEFT SIDE</b>  | .0375    | .0430 | .0415 | .0420 | .0410   | .0260                |                      |

**Note:** 1<sup>st</sup> Rim Pass is taken with face readings. 2<sup>nd</sup> Rim Pass is an independent verification check.

 S/N OF PRECISION TOOL \_\_\_\_\_ CALIBRATION DATE \_\_\_\_\_  
 \_\_\_\_\_

RECORDED BY: \_\_\_\_\_ REVIEWED BY: \_\_\_\_\_

Matthew Ryan  
 cn=Matthew Ryan, o=Siemens  
 Energy,  
 email=matthew.ryan@siemens-  
 energy.com  
 2026.01.02 11:37:19 -04'00'

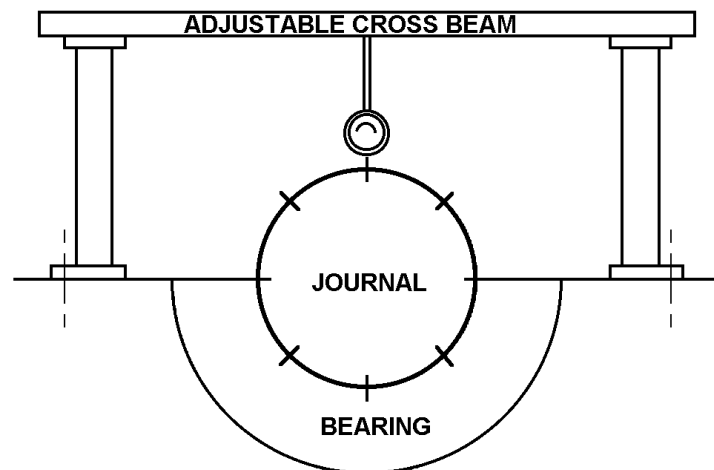
FILE: 8-02-08 SGT6-5000F (W501F)/REV. 07

DATE: \_\_\_\_\_

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|                                  |                |                             |               |                       |                  |
|----------------------------------|----------------|-----------------------------|---------------|-----------------------|------------------|
| CLIENT NS Power                  | ORDER No.      | READINGS TAKEN BY D. Martin | DATE:         | WP/ITP REF#           | IR SHEET REF.    |
| LOCATION Tufts Cove              | PROOF READ BY: | SUPERVISED BY A. Molnar     | Dec 8/25      | P-EFP-3083.01-0001-02 | <b>AL.O.04a</b>  |
| STATUS WHEN INSPECTED<br>As Left | UNIT No. 1     | INSTRUMENT TYPE:            | CAL DUE DATE: |                       | COMPONENT ID No. |
|                                  | M/C No.        | INSTRUMENT No.              |               |                       |                  |

X SIDE      LOOKING FROM GOVERNOR END      Y SIDE



| FINAL CONCENTRICITY |            |            |
|---------------------|------------|------------|
| POSITION            | BRG No. HP | BRG No. IP |
| 0                   | 50         | 55         |
| 1                   | 54         | 56         |
| 2                   | 43         | 56         |
| 3                   | 47         | 55         |
| 4                   | 42         | 55         |
| 5                   | 50         | 51         |
| 6                   | 55         | 50         |
| 7                   | 51         | 51         |
| 0                   | 50         | 55         |

| OVALITY CHECK |              |              |
|---------------|--------------|--------------|
| POSITION      | BRG No. ____ | BRG No. ____ |
| 0             |              |              |
| 1             |              |              |
| 2             |              |              |
| 3             |              |              |
| 4             |              |              |
| 5             |              |              |
| 6             |              |              |
| 7             |              |              |
| 0             |              |              |

## NOTE:

ALL READINGS (x0.0001")

ROTATE SHAFTS \_\_\_\_ SIDE TO \_\_\_\_ SIDE BY 1/8 TURNS AND RECORD DIAL GAUGE READINGS.

ENSURE THAT CRANE IS NOT SUPPORTING SHAFT WHEN READINGS ARE BEING RECORDED.

MARK POSITION TAKEN ON GRAPHIC

No. \_\_\_\_ BEARING REMOVED

## REMARKS:

|  |                                                                   |                                                                                                           |                           |                               |                     |
|--|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------|-------------------------------|---------------------|
|  | Approved by TFA: Matthew Ryan<br>Disposition Required Y/N<br>Ref# | Verified by QA: Matthew Ryan, o=Siemens Energy, email=matthew.ryan@siemens-energy.com<br>Date: 12/02/2025 | Reviewed by Eng:<br>Date: | <b>COUPLING CONCENTRICITY</b> | Ref #.<br><b>60</b> |
|  |                                                                   |                                                                                                           |                           |                               |                     |

|                                         |                   |                  |                    |               |                              |                  |
|-----------------------------------------|-------------------|------------------|--------------------|---------------|------------------------------|------------------|
| CLIENT <b>NS Power</b>                  | ORDER No.         |                  | READINGS TAKEN BY: | DATE:         | WP/ITP REF#                  | IR SHEET REF.    |
| LOCATION <b>Tufts Cove</b>              | PROOF READY BY:   |                  | SUPERVISED BY:     |               | <b>P-EFP-3083.01-0001-02</b> | <b>MI.O.01</b>   |
| STATUS WHEN INSPECTED<br><b>As Left</b> | UNIT No. <b>1</b> | INSTRUMENT TYPE: |                    | CAL DUE DATE: |                              | COMPONENT ID No. |
|                                         | M/C No.           | INSTRUMENT No.   |                    |               |                              |                  |

| Bolt No. | Bolt Length<br>Untightened | Bolt Length<br>Tightened | Measured Stretch |
|----------|----------------------------|--------------------------|------------------|
| 1        | 11.458                     | 11.464                   | 0.006            |
| 2        | 11.657                     | 11.663                   | 0.006            |
| 3        | 11.491                     | 11.497                   | 0.006            |
| 4        | 11.623                     | 11.629                   | 0.006            |
| 5        | 11.486                     | 11.492                   | 0.006            |
| 6        | 11.633                     | 11.639                   | 0.006            |
| 7        | 11.481                     | 11.488                   | 0.007            |
| 8        | 11.643                     | 11.649                   | 0.006            |
| 9        | 11.474                     | 11.48                    | 0.006            |
| 10       | 11.612                     | 11.618                   | 0.006            |
| 11       | 11.480                     | 11.486                   | 0.006            |
| 12       | 11.643                     | 11.649                   | 0.006            |
| 13       | 11.470                     | 11.476                   | 0.006            |
| 14       | 11.643                     | 11.649                   | 0.006            |

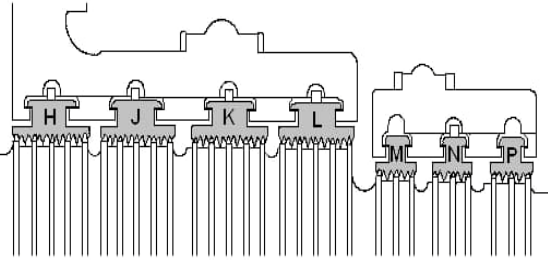
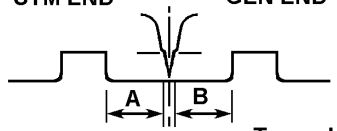
REMARKS:

|                                                                                     |                                                                                                                                                                    |                                                                                                                 |                           |                                                  |                     |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|---------------------------|--------------------------------------------------|---------------------|
|  | Reviewed by TFA: <b>Matthew Ryan</b><br><small>cn=Matthew Ryan, o=Siemens Energy, email=matthew.ryan@siemens-energy.com</small><br>Disposition Required <b>Y/N</b> | Verified by QA: <b>Ryan</b><br><small>cn=Ryan, o=Siemens Energy, email=ryan@siemens-energy.com</small><br>Date: | Reviewed by Eng:<br>Date: | <b>HP-IP Coupling Bolt Lengths &amp; Stretch</b> | Ref #.<br><b>61</b> |
|                                                                                     | Ref #.                                                                                                                                                             |                                                                                                                 |                           |                                                  | Sheet of            |

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P9.7-016EF-03

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |       |       |       |  |                |                  |                             |               |       |           |                       |        |                 |       |       |       |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|-------|-------|--|----------------|------------------|-----------------------------|---------------|-------|-----------|-----------------------|--------|-----------------|-------|-------|-------|--|
| CLIENT <b>NS Power</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |       |       |       |       |  | ORDER No.      |                  | READINGS TAKEN BY: B. Smith |               |       | DATE:     | WP/ITP REF#           |        | IR SHEET REF.   |       |       |       |  |
| LOCATION <b>Tufts Cove</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |       |       |       |       |  | PROOF READ BY: |                  | SUPERVISED BY: A. Molnar    |               |       | Nov 20/25 | P-EFP-3083.01-0001-02 |        | <b>GL.O.524</b> |       |       |       |  |
| STATUS WHEN INSPECTED<br><br>As Found                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |       |       |       |       |  | UNIT No. 1     | INSTRUMENT TYPE: |                             |               |       |           |                       |        |                 |       |       |       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |       |       |       |  | M/C No.        | INSTRUMENT No.   |                             | CAL DUE DATE: |       |           |                       |        |                 |       |       |       |  |
| <div style="text-align: center;"><br/><br/></div> <div style="text-align: center;">AXIAL CLEARANCES (Inches)<br/>STM END                  GEN END</div> <div style="text-align: center;"></div> <div style="margin-left: 10%; margin-top: -10px;">→ Towards Generator<br/>← Away From Generator</div> <div style="font-size: small; font-weight: bold; padding-top: 10px;">NOTE: AXIAL CLEARANCES TO BE CHECKED WITH SHAFT IN COLD RUNNING POSITION I.E. ON GENERATOR END PADS</div> |       |       |       |       |  | RING NO        | X SIDE           | Y SIDE                      | TOP           | BTM   | BUTT CLR  | RING NO               | X SIDE | Y SIDE          | TOP   | BTM   |       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |       |       |       |  | A              |                  |                             |               |       |           |                       | A      |                 |       |       |       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |       |       |       |  | 1              | 0.023            | 0.022                       | 0.025         | 0.030 |           |                       | Z      | 0.020           | 0.029 | 0.021 | 0.022 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |       |       |       |  | B              |                  |                             |               |       |           |                       | B      |                 |       |       |       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |       |       |       |  | A              |                  |                             |               |       |           |                       | A      |                 |       |       |       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |       |       |       |  | 2              | 0.026            | 0.024                       | 0.024         | 0.027 |           |                       | 8      | 0.019           | 0.028 | 0.024 | 0.016 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |       |       |       |  | B              |                  |                             |               |       |           |                       | B      |                 |       |       |       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |       |       |       |  | A              |                  |                             |               |       |           |                       |        |                 |       |       |       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |       |       |       |  | 3              | 0.022            | 0.038                       | 0.026         | 0.027 |           |                       |        |                 |       |       |       |  |
| B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |       |       |       |       |  |                |                  |                             |               |       |           |                       |        |                 |       |       |       |  |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |       |       |       |       |  |                |                  |                             |               |       |           |                       |        |                 |       |       |       |  |
| 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 0.020 | 0.032 | 0.023 | 0.020 |  |                |                  |                             |               |       |           |                       |        |                 |       |       |       |  |
| B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |       |       |       |       |  |                |                  |                             |               |       |           |                       |        |                 |       |       |       |  |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |       |       |       |       |  |                |                  |                             |               |       |           |                       |        |                 |       |       |       |  |
| 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 0.020 | 0.030 | 0.029 | 0.023 |  |                |                  |                             |               |       |           |                       |        |                 |       |       |       |  |
| B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |       |       |       |       |  |                |                  |                             |               |       |           |                       |        |                 |       |       |       |  |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |       |       |       |       |  |                |                  |                             |               |       |           |                       |        |                 |       |       |       |  |
| 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 0.023 | 0.041 | 0.023 | 0.026 |  |                |                  |                             |               |       |           |                       |        |                 |       |       |       |  |
| B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |       |       |       |       |  |                |                  |                             |               |       |           |                       |        |                 |       |       |       |  |

|     |  |      |               |
|-----|--|------|---------------|
| TOP |  | SIDE | SEMI - HEIGHT |
|-----|--|------|---------------|

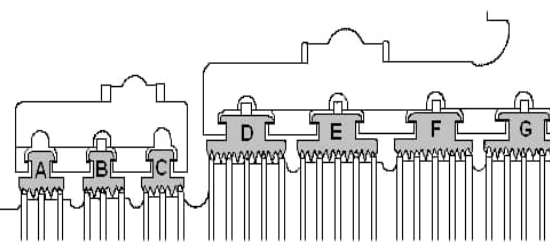
|      |             |
|------|-------------|
| POS. | AXIAL CLRs. |
| A    |             |
| B    |             |

|                                |             |
|--------------------------------|-------------|
| GLAND LINER THICKNESS (INCHES) |             |
| OUTER LINER                    | INNER LINER |

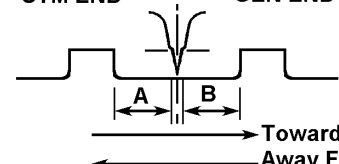
|                                                                                     |  |                                         |  |                                          |  |                                                               |  |                  |  |
|-------------------------------------------------------------------------------------|--|-----------------------------------------|--|------------------------------------------|--|---------------------------------------------------------------|--|------------------|--|
| Reviewed by TFA:<br><b>Matthew Ryan</b><br><small>Disposition Required Ref#</small> |  | Verified by QA:<br><small>Date:</small> |  | Reviewed by Eng:<br><small>Date:</small> |  | <b>No. 1 GLAND RADIAL / AXIAL CLEARANCES (150MW TYPE M/C)</b> |  | Ref #.<br><br>20 |  |
|-------------------------------------------------------------------------------------|--|-----------------------------------------|--|------------------------------------------|--|---------------------------------------------------------------|--|------------------|--|

|                                       |                |                             |               |                       |                  |
|---------------------------------------|----------------|-----------------------------|---------------|-----------------------|------------------|
| CLIENT <b>NS Power</b>                | ORDER No.      | READINGS TAKEN BY: B. Smith | DATE:         | WP/ITP REF#           | IR SHEET REF.    |
| LOCATION <b>Tufts Cove</b>            | PROOF READ BY: | SUPERVISED BY: A. Molnar    | Nov 20/25     | P-EFP-3083.01-0001-02 | <b>GL.O.525</b>  |
| STATUS WHEN INSPECTED<br><br>As Found | UNIT No. 1     | INSTRUMENT TYPE:            | CAL DUE DATE: |                       | COMPONENT ID No. |
|                                       | M/C No.        | INSTRUMENT No.              |               |                       |                  |



**AXIAL CLEARANCES (Inches)**  
STM END      GEN END



Towards Generator  
 ← Away From Generator

NOTE: AXIAL CLEARANCES TO BE CHECKED WITH SHAFT IN COLD RUNNING POSITION i.e. ON GENERATOR END PADS

| RING No | RADIAL CLEARANCES |        |       |       |          | RING No | RADIAL CLEARANCES |        |       |       |          |
|---------|-------------------|--------|-------|-------|----------|---------|-------------------|--------|-------|-------|----------|
|         | X SIDE            | Y SIDE | TOP   | BTM   | BUTT CLR |         | X SIDE            | Y SIDE | TOP   | BTM   | BUTT CLR |
| A       |                   |        |       |       |          | A       |                   |        |       |       |          |
| 9       | 0.021             | 0.026  | 0.044 | 0.030 |          | 17      | 0.027             | 0.030  | 0.027 | 0.023 |          |
| B       |                   |        |       |       |          | B       |                   |        |       |       |          |
| A       |                   |        |       |       |          | A       |                   |        |       |       |          |
| 10      | 0.022             | 0.024  | 0.041 | 0.025 |          | 18      | 0.021             | 0.031  | 0.026 | 0.025 |          |
| B       |                   |        |       |       |          | B       |                   |        |       |       |          |
| A       |                   |        |       |       |          | A       |                   |        |       |       |          |
| 11      | 0.022             | 0.023  | 0.043 | 0.025 |          | 19      | 0.020             | 0.021  | 0.024 | 0.018 |          |
| B       |                   |        |       |       |          | B       |                   |        |       |       |          |
| A       |                   |        |       |       |          | A       |                   |        |       |       |          |
| 12      | 0.029             | 0.023  | 0.042 | 0.023 |          | 20      | 0.022             | 0.023  | 0.026 | 0.019 |          |
| B       |                   |        |       |       |          | B       |                   |        |       |       |          |
| A       |                   |        |       |       |          | A       |                   |        |       |       |          |
| 13      | 0.026             | 0.027  | 0.038 | 0.026 |          | 21      | 0.017             | 0.023  | 0.018 | 0.019 |          |
| B       |                   |        |       |       |          | B       |                   |        |       |       |          |
| A       |                   |        |       |       |          | A       |                   |        |       |       |          |
| 14      | 0.018             | 0.024  | 0.035 | 0.020 |          | 22      | 0.029             | 0.031  | 0.029 | 0.023 |          |
| B       |                   |        |       |       |          | B       |                   |        |       |       |          |
| A       |                   |        |       |       |          | A       |                   |        |       |       |          |
| 15      | 0.019             | 0.025  | 0.039 | 0.024 |          | 23      | 0.020             | 0.027  | 0.025 | 0.021 |          |
| B       |                   |        |       |       |          | B       |                   |        |       |       |          |
| A       |                   |        |       |       |          | A       |                   |        |       |       |          |
| 16      | 0.024             | 0.010  | 0.030 | 0.022 |          | 24      | 0.031             | 0.037  | 0.030 | 0.018 |          |
| B       |                   |        |       |       |          | B       |                   |        |       |       |          |
|         |                   |        |       |       |          | A       |                   |        |       |       |          |
|         |                   |        |       |       |          | 25      | 0.033             | 0.047  | 0.027 | 0.025 |          |
|         |                   |        |       |       |          | B       |                   |        |       |       |          |

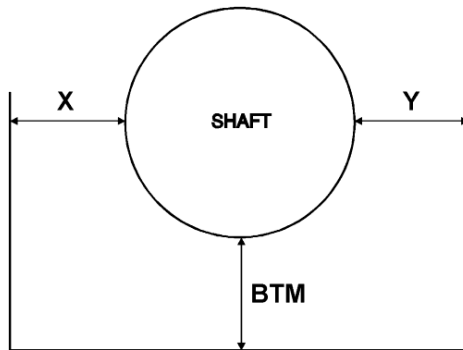
  

| POS. | AXIAL CLR. | GLAND LINER THICKNESS (INCHES) |             | No. BEARING (x0.001") |      |               |
|------|------------|--------------------------------|-------------|-----------------------|------|---------------|
| A    |            | OUTER LINER                    | INNER LINER | TOP                   | SIDE | SEMI - HEIGHT |
| B    |            |                                |             |                       |      |               |

|                                                                                     |                                                                                  |                                              |                           |                                                               |                  |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------|---------------------------|---------------------------------------------------------------|------------------|
|  | Reviewed by TFA: <b>Matthew Ryan</b><br>Disposition Required: <b>Y/N</b><br>Ref# | Verified by QA: <b>Matthew Ryan</b><br>Date: | Reviewed by Eng:<br>Date: | <b>No. 2 GLAND RADIAL / AXIAL CLEARANCES (150MW TYPE M/C)</b> | Ref #.<br><br>66 |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------|---------------------------|---------------------------------------------------------------|------------------|

|                                      |                       |                  |                             |          |                       |                                 |
|--------------------------------------|-----------------------|------------------|-----------------------------|----------|-----------------------|---------------------------------|
| CLIENT    NS Power                   | ORDER No.             |                  | READINGS TAKEN BY: B. Smith | DATE:    | WP/ITP REF#           | IR SHEET REF.<br><b>AL.O.27</b> |
|                                      | LOCATION   Tufts Cove |                  | PROOF READ BY:              | Dec 4/25 | P-EFP-3083.01-0001-02 |                                 |
| STATUS WHEN INSPECTED<br><br>As Left | UNIT No.   1          | INSTRUMENT TYPE: | CAL DUE DATE:               |          | COMPONENT ID No.      |                                 |
|                                      | M/C No.               | INSTRUMENT No.   |                             |          |                       |                                 |



REMARKS:

[illegible]

|                                                                                     |                                                                                      |                                                  |                                       |                                        |              |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------|---------------------------------------|----------------------------------------|--------------|
|  | Reviewed by TFA: Matthew Ryan<br>Disposition Required Y/N<br>Ref#                    | Verified by QA: Matthew Ryan<br>Date: 10/01/2025 | Reviewed by Eng: _____<br>Date: _____ | <b>SHAFT POSITION RADIAL BIRDSEYES</b> | Ref #.<br>67 |
|                                                                                     |  |                                                  |                                       |                                        |              |

|                                  |                |                               |               |                       |                 |
|----------------------------------|----------------|-------------------------------|---------------|-----------------------|-----------------|
| CLIENT NS Power                  | ORDER No.      | READINGS TAKEN BY: J. Macphee | DATE:         | WP/ITP REF#           | IR SHEET REF.   |
| LOCATION Tufts Cove              | PROOF READ BY: | SUPERVISED BY:                | Nov 19/25     | P-EFP-3083.01-0001-02 | <b>BG.O.524</b> |
| STATUS WHEN INSPECTED<br>As Left | UNIT No. 1     | INSTRUMENT TYPE:              | CAL DUE DATE: | COMPONENT ID No.      |                 |
|                                  | M/C No.        | INSTRUMENT No.                |               |                       |                 |

KEEP NIP

-.002

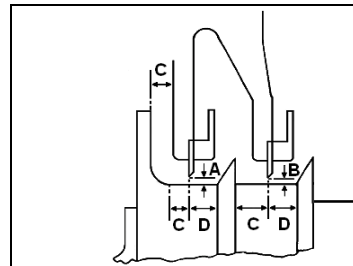
Taken By:-

Date:

| BEARING & JOURNAL READINGS |                 |          |      |  |
|----------------------------|-----------------|----------|------|--|
|                            | READING         | Taken By | Date |  |
| Journal Diameter           |                 |          |      |  |
| Semi Height                |                 |          |      |  |
| Bridge Gauge Reading       | Top             |          |      |  |
|                            | Side            |          |      |  |
| Bearing Oil Clearances     | Turbine End X   | .006     |      |  |
|                            | Generator End X | .006     |      |  |
|                            | Turbine End Y   | .005     |      |  |
|                            | Generator End Y | .005     |      |  |
|                            | Top             | .012     |      |  |

BEARING VISUAL INSPECTION; COMMENTS:-

|      |  |
|------|--|
| NAME |  |
| DATE |  |



Note: for axial readings record only the 'MINIMUM' clearance at positions C and D.

PEDESTAL LEVELS

TE \_\_\_\_\_ GE

Date

Taken By

JOURNAL LEVEL

TE \_\_\_\_\_ GE

Date

Taken By

MAIN OIL BAFFLE CLEARANCES

| POSITION                                 | X | Y | TOP | BOTTOM     |
|------------------------------------------|---|---|-----|------------|
| A                                        |   |   |     |            |
| B                                        |   |   |     |            |
| C                                        |   |   |     |            |
| D                                        |   |   |     |            |
| Shaft Position When Axial Readings Taken |   |   |     | (Birdseye) |
| Taken By:-                               |   |   |     |            |
| Date:-                                   |   |   |     |            |

BEARING OIL WIPER CLEARANCES

| POSITION      | X | Y | TOP | BOTTOM |
|---------------|---|---|-----|--------|
| Turbine End   |   |   |     |        |
| Generator End |   |   |     |        |
| Taken By:-    |   |   |     |        |
| Date:-        |   |   |     |        |

BEARING NDT RESULTS

|          | Pass/Fail | NDT Report No | Date |
|----------|-----------|---------------|------|
| Top Half |           |               |      |
| Btm Half |           |               |      |

FINAL PRE BOX-UP INSPECTION OF BRG WELL

|              |  |      |  |
|--------------|--|------|--|
| CHECKED BY   |  | DATE |  |
| WITNESSED BY |  | DATE |  |

Reviewed by TFA: Matthew Ryan  
 Verified by QA: Matthew Ryan  
 Disposition Required: N/A  
 Ref#

Reviewed by Eng:

Date:

# No. 1 BEARING AND PEDESTAL INSPECTIONS

Ref #.

68

|                                  |                |                            |               |                       |                  |
|----------------------------------|----------------|----------------------------|---------------|-----------------------|------------------|
| CLIENT NS Power                  | ORDER No.      | READINGS TAKEN BY B. Smith | DATE:         | WP/ITP REF#           | IR SHEET REF.    |
| LOCATION Tufts Cove              | PROOF READ BY: | SUPERVISED BY:             | Dec 9/25      | P-EFP-3083.01-0001-02 | <b>BG.O.524</b>  |
| STATUS WHEN INSPECTED<br>As Left | UNIT No. 1     | INSTRUMENT TYPE:           | CAL DUE DATE: |                       | COMPONENT ID No. |
|                                  | M/C No.        | INSTRUMENT No.             |               |                       |                  |

KEEP NIP

.003

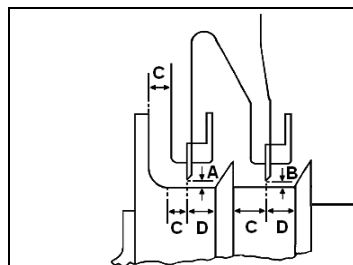
Taken By:-

Date:

| BEARING & JOURNAL READINGS |                 |          |      |
|----------------------------|-----------------|----------|------|
|                            | READING         | Taken By | Date |
| Journal Diameter           |                 |          |      |
| Semi Height                |                 |          |      |
| Bridge Gauge               | Top             | .0345    |      |
| Reading                    | Side            |          |      |
| Bearing Oil Clearances     | Turbine End X   | .009     |      |
|                            | Generator End X | .008     |      |
|                            | Turbine End Y   | .007     |      |
|                            | Generator End Y | .007     |      |
|                            | Top             | .017     |      |

BEARING VISUAL INSPECTION; COMMENTS:-

|      |  |
|------|--|
| NAME |  |
| DATE |  |



Note: for axial readings record only the 'MINIMUM' clearance at positions C and D.

PEDESTAL LEVELS

TE \_\_\_\_\_ GE

Date

Taken By

JOURNAL LEVEL

TE \_\_\_\_\_ GE

Date

Taken By

MAIN OIL BAFFLE CLEARANCES

| POSITION                                 | X | Y | TOP | BOTTOM     |
|------------------------------------------|---|---|-----|------------|
| A                                        |   |   |     |            |
| B                                        |   |   |     |            |
| C                                        |   |   |     |            |
| D                                        |   |   |     |            |
| Shaft Position When Axial Readings Taken |   |   |     | (Birdseye) |
| Taken By:-                               |   |   |     |            |
| Date:-                                   |   |   |     |            |

BEARING OIL WIPER CLEARANCES

| POSITION      | X | Y | TOP | BOTTOM |
|---------------|---|---|-----|--------|
| Turbine End   |   |   |     |        |
| Generator End |   |   |     |        |
| Taken By:-    |   |   |     |        |
| Date:-        |   |   |     |        |

BEARING NDT RESULTS

|          | Pass/Fail | NDT Report No | Date |
|----------|-----------|---------------|------|
| Top Half |           |               |      |
| Btm Half |           |               |      |

FINAL PRE BOX-UP INSPECTION OF BRG WELL

|              |  |      |  |
|--------------|--|------|--|
| CHECKED BY   |  | DATE |  |
| WITNESSED BY |  | DATE |  |

Reviewed by TFA: Matthew Ryan  
 Verified by QA: Matthew Ryan  
 Disposition Required: N/A  
 Ref#

Reviewed by Eng:

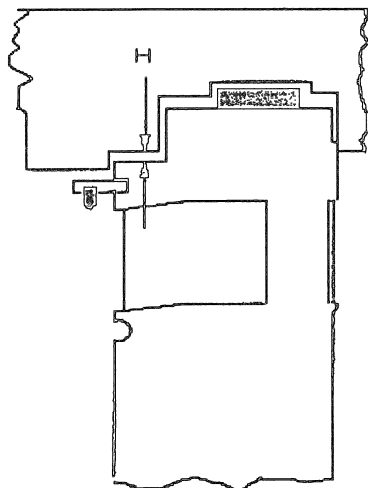
Date:

## No. 2 BEARING AND PEDESTAL INSPECTIONS

Ref #.

69

|                                       |                |                  |                                  |           |                       |                 |
|---------------------------------------|----------------|------------------|----------------------------------|-----------|-----------------------|-----------------|
| CLIENT <b>NS Power</b>                | ORDER No.      |                  | READINGS TAKEN BY: Dave M/Brad S | DATE:     | WP/ITP REF#           | IR SHEET REF.   |
| LOCATION <b>Tufts Cove</b>            | PROOF READ BY: |                  | SUPERVISED BY: A. Molnar         | Oct 20/25 | P-EFP-3083.01-0001-02 | <b>LP.A.504</b> |
| STATUS WHEN INSPECTED<br><br>As Found | UNIT No. 1     | INSTRUMENT TYPE: | CAL DUE DATE:                    |           | COMPONENT ID No.      |                 |
|                                       | M/C No.        | INSTRUMENT No.   |                                  |           |                       |                 |



READINGS TO BE TAKEN AT POSITION STAMPED 'X' DIAPHRAGMS TO BE HELD  
HARD TO RIGHT

| STAGE | LHS   | RHS   | (ROCK) |
|-------|-------|-------|--------|
| 1     | 0.000 | 0.028 |        |
| 2     | 0.019 | 0.014 |        |
| 3     | 0.038 | 0.018 |        |
| 4     | 0.017 | 0.014 |        |
| 5     | 0.023 | 0.007 |        |
| 6     | 0.019 | 0.014 |        |
| 7     | 0.015 | 0.006 |        |
| 8     | 0.013 | 0.017 |        |
| 9     | 0.012 | 0.018 |        |
|       |       |       |        |

REMARKS:

**SIEMENS**  
energy

Reviewed by TFA: Matthew Ryan  
 Disposition Required Y/N  
 Ref#

Verified by QA: Matthew Ryan  
 Date:

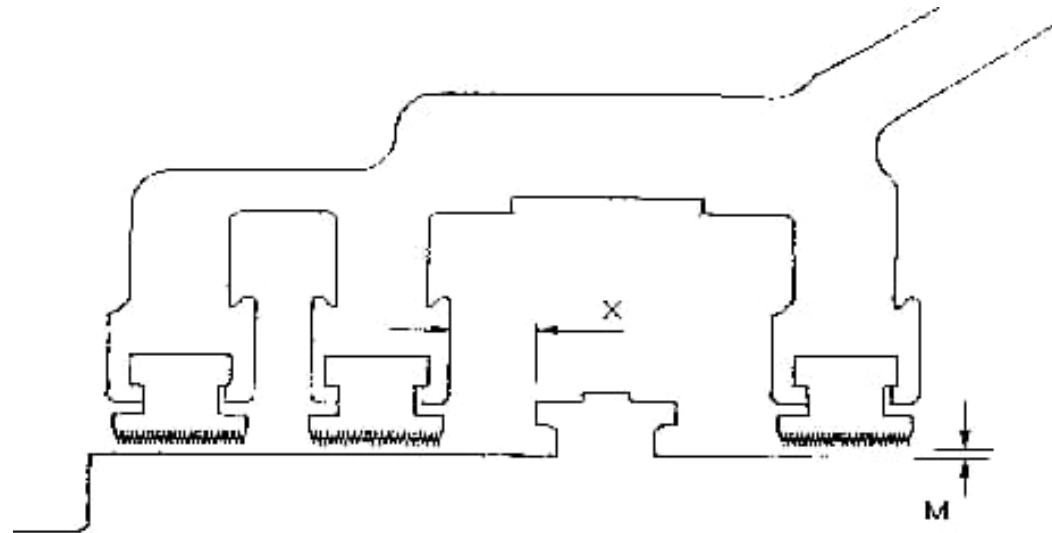
Reviewed by Eng:  
 Date:

**HP BOTTOM HALF DIAPHRAGM 'H'  
 DATUM'S (TRANSALTA)**

Ref #.

|                            |                |                            |               |                       |                  |
|----------------------------|----------------|----------------------------|---------------|-----------------------|------------------|
| CLIENT <b>NS Power</b>     | ORDER No.      | READINGS TAKEN BY: Dave M. | DATE:         | WP/ITP REF#           | IR SHEET REF.    |
| LOCATION <b>Tufts Cove</b> | PROOF READ BY: | SUPERVISED BY: A. Molnar   | Oct 12/25     | P-EFP-3083.01-0001-02 | <b>GL.O.501a</b> |
| STATUS WHEN INSPECTED      | UNIT No. 1     | INSTRUMENT TYPE:           | CAL DUE DATE: |                       | COMPONENT ID No. |
| As Found                   | M/C No.        | INSTRUMENT No.             |               |                       |                  |

NOTE: ALL CLEARANCES TAKEN WITH ROTOR IN RUNNING POSITION, MINIMUM CLEARANCE TO BE RECORDED



| HP EXHAUST GLAND |        |        |        |       |       |
|------------------|--------|--------|--------|-------|-------|
| POSITION         |        | DESIGN | ACTUAL |       |       |
|                  |        |        | 1      | 2     | 3     |
| M                | TOP    |        | 0.021  | 0.023 | 0.022 |
|                  | BOTTOM |        |        |       |       |
|                  | LHS    |        | 0.019  | 0.028 | 0.030 |
|                  | RHS    |        | 0.033  | 0.028 | 0.030 |
| X                |        |        |        |       |       |

REMARKS:

**SIEMENS**  
energy

Reviewed by TFA: Matthew Ryan  
 Disposition Required Y/N  
 Ref#

Verified by QA: Matthew Ryan  
 Date: 2025/02/11

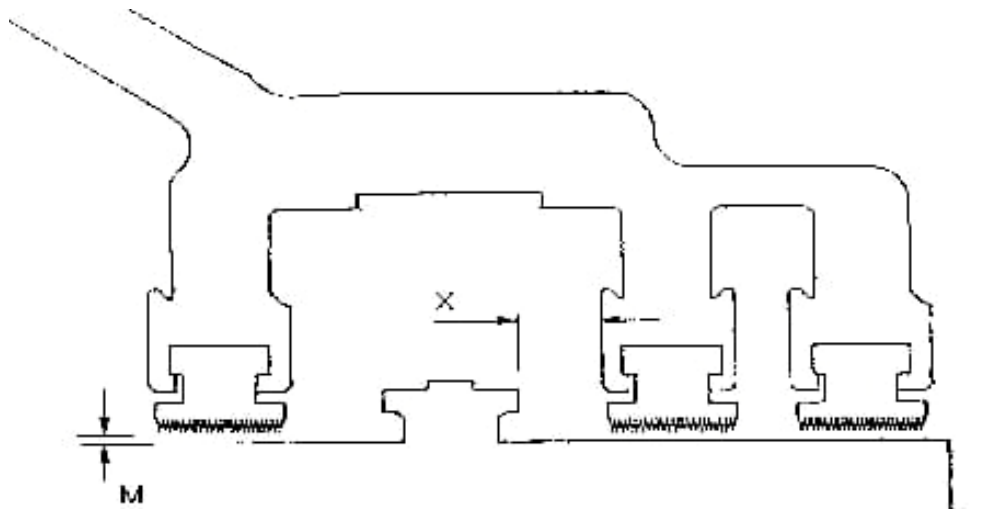
Reviewed by Eng:  
 Date:

**HP STEAM GLAND (EX PADDLE WHEEL)  
 CLEARANCES (EXHAUST) (SUNDANCE)**

Ref #.

|                                       |                   |            |                  |                           |               |                       |                  |
|---------------------------------------|-------------------|------------|------------------|---------------------------|---------------|-----------------------|------------------|
| CLIENT                                | <b>NS Power</b>   |            | ORDER No.        | READINGS TAKEN BY: Dave M | DATE:         | WP/ITP REF#           | IR SHEET REF.    |
| LOCATION                              | <b>Tufts Cove</b> |            | PROOF READ BY:   | SUPERVISED BY: A. Molnar  | Oct 12/25     | P-EFP-3083.01-0001-02 | <b>GL.O.501b</b> |
| STATUS WHEN INSPECTED<br><br>As Found |                   | UNIT No. 1 | INSTRUMENT TYPE: |                           | CAL DUE DATE: |                       | COMPONENT ID No. |
|                                       |                   | M/C No.    | INSTRUMENT No.   |                           |               |                       |                  |

NOTE: ALL CLEARANCES TAKEN WITH ROTOR IN RUNNING POSITION, MINIMUM CLEARANCE TO BE RECORDED



| HP INLET GLAND |        |        |        |       |       |
|----------------|--------|--------|--------|-------|-------|
| POSITION       |        | DESIGN | ACTUAL |       |       |
|                |        |        | N1     | N2    | N3    |
| M              | TOP    |        | 0.017  | 0.029 | 0.026 |
|                | BOTTOM |        |        |       |       |
|                | LHS    |        | 0.026  | 0.028 | 0.024 |
|                | RHS    |        | 0.022  | 0.024 | 0.018 |
| X              |        |        |        |       |       |

REMARKS:

**SIEMENS**  
energy

Reviewed by TFA: **Matthew Ryan**  
Matthew Ryan, cn=Matthew Ryan, o=Siemens Energy, email=matthew.ryan@siemens-energy.com, 2024.02.11 14:43:00 -0400  
 Disposition Required Y/N  
 Ref#

Verified by QA:  
 Date:

Reviewed by Eng:  
 Date:

**HP STEAM GLAND (EX PADDLE WHEEL)  
CLEARANCES (INLET) (SUNDANCE)**

Ref #.

|                                  |                |                            |               |                       |                  |
|----------------------------------|----------------|----------------------------|---------------|-----------------------|------------------|
| CLIENT NS Power                  | ORDER No.      | READINGS TAKEN BY B. Smith | DATE:         | WP/ITP REF#           | IR SHEET REF.    |
| LOCATION Tufts Cove              | PROOF READ BY: | SUPERVISED BY:             | Dec 9/25      | P-EFP-3083.01-0001-02 | <b>BG.O.524</b>  |
| STATUS WHEN INSPECTED<br>As Left | UNIT No. 1     | INSTRUMENT TYPE:           | CAL DUE DATE: |                       | COMPONENT ID No. |
|                                  | M/C No.        | INSTRUMENT No.             |               |                       |                  |

KEEP NIP

.002

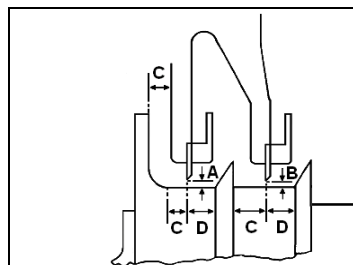
Taken By:-

Date:

| BEARING & JOURNAL READINGS |                 |          |      |  |
|----------------------------|-----------------|----------|------|--|
|                            | READING         | Taken By | Date |  |
| Journal Diameter           |                 |          |      |  |
| Semi Height                |                 |          |      |  |
| Bridge Gauge Reading       | Top             | .014     |      |  |
|                            | Side            |          |      |  |
| Bearing Oil Clearances     | Turbine End X   | .009     |      |  |
|                            | Generator End X | .008     |      |  |
|                            | Turbine End Y   | .009     |      |  |
|                            | Generator End Y | .011     |      |  |
|                            | Top             | .013     |      |  |

BEARING VISUAL INSPECTION; COMMENTS:-

|      |  |
|------|--|
| NAME |  |
| DATE |  |



Note: for axial readings record only the 'MINIMUM' clearance at positions C and D.

PEDESTAL LEVELS

TE \_\_\_\_\_ GE

Date

Taken By

JOURNAL LEVEL

TE \_\_\_\_\_ GE

Date

Taken By

MAIN OIL BAFFLE CLEARANCES

| POSITION                                 | X | Y | TOP | BOTTOM     |
|------------------------------------------|---|---|-----|------------|
| A                                        |   |   |     |            |
| B                                        |   |   |     |            |
| C                                        |   |   |     |            |
| D                                        |   |   |     |            |
| Shaft Position When Axial Readings Taken |   |   |     | (Birdseye) |
| Taken By:-                               |   |   |     |            |
| Date:-                                   |   |   |     |            |

BEARING OIL WIPER CLEARANCES

| POSITION      | X | Y | TOP | BOTTOM |
|---------------|---|---|-----|--------|
| Turbine End   |   |   |     |        |
| Generator End |   |   |     |        |
| Taken By:-    |   |   |     |        |
| Date:-        |   |   |     |        |

BEARING NDT RESULTS

|          | Pass/Fail | NDT Report No | Date |
|----------|-----------|---------------|------|
| Top Half |           |               |      |
| Btm Half |           |               |      |

FINAL PRE BOX-UP INSPECTION OF BRG WELL

|              |  |      |  |
|--------------|--|------|--|
| CHECKED BY   |  | DATE |  |
| WITNESSED BY |  | DATE |  |

Reviewed by TFA: Matthew Ryan  
 Verified by QA: Matthew Ryan  
 Disposition Required: N/A  
 Ref#

Reviewed by Eng:

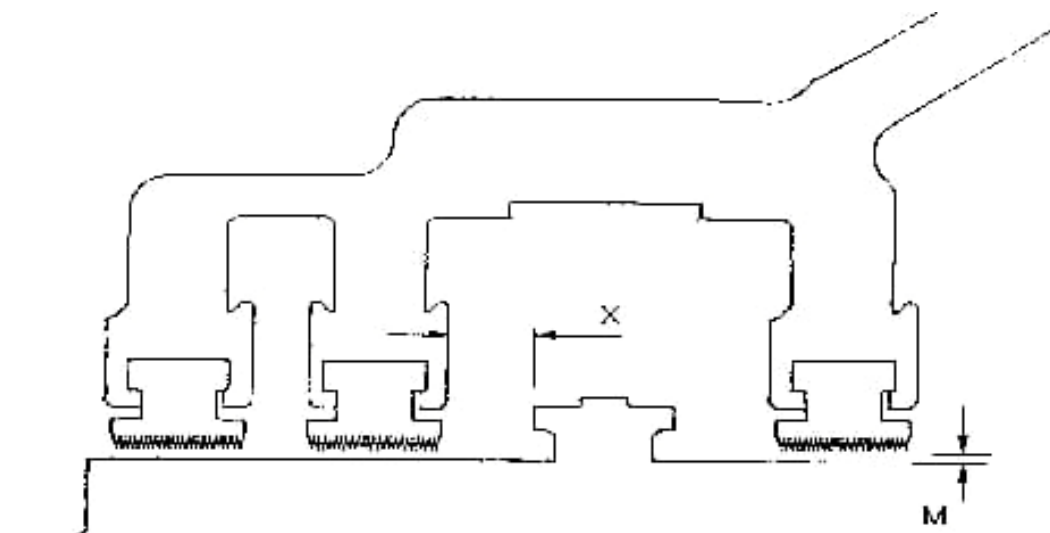
Date:

## No. 3 BEARING AND PEDESTAL INSPECTIONS

Ref #.

|                                      |                |                             |               |                       |                  |
|--------------------------------------|----------------|-----------------------------|---------------|-----------------------|------------------|
| CLIENT <b>NS Power</b>               | ORDER No.      | READINGS TAKEN BY: B. Smith | DATE:         | WP/ITP REF#           | IR SHEET REF.    |
| LOCATION <b>Tufts Cove</b>           | PROOF READ BY: | SUPERVISED BY: A. Molnar    | Dec 02/25     | P-EFP-3083.01-0001-02 | <b>GL.O.501a</b> |
| STATUS WHEN INSPECTED<br><br>As Left | UNIT No. 1     | INSTRUMENT TYPE:            | CAL DUE DATE: |                       | COMPONENT ID No. |
|                                      | M/C No.        | INSTRUMENT No.              |               |                       |                  |

NOTE: ALL CLEARANCES TAKEN WITH ROTOR IN RUNNING POSITION, MINIMUM CLEARANCE TO BE RECORDED



| HP EXHAUST GLAND |        |        |        |       |       |
|------------------|--------|--------|--------|-------|-------|
| POSITION         |        | DESIGN | ACTUAL |       |       |
|                  |        |        | 1      | 2     | 3     |
| M                | TOP    |        | 0.021  | 0.034 | 0.034 |
|                  | BOTTOM |        | 0.009  | 0.009 | 0.008 |
|                  | LHS    |        | 0.024  | 0.024 | 0.024 |
|                  | RHS    |        | 0.028  | 0.021 | 0.016 |
| X                |        |        |        |       |       |

REMARKS:

**SIEMENS**  
energy

Reviewed by TFA: Matthew Ryan  
 Disposition Required: N/A  
 Ref#

Verified by QA: Matthew Ryan  
 Date: 02/11/2025

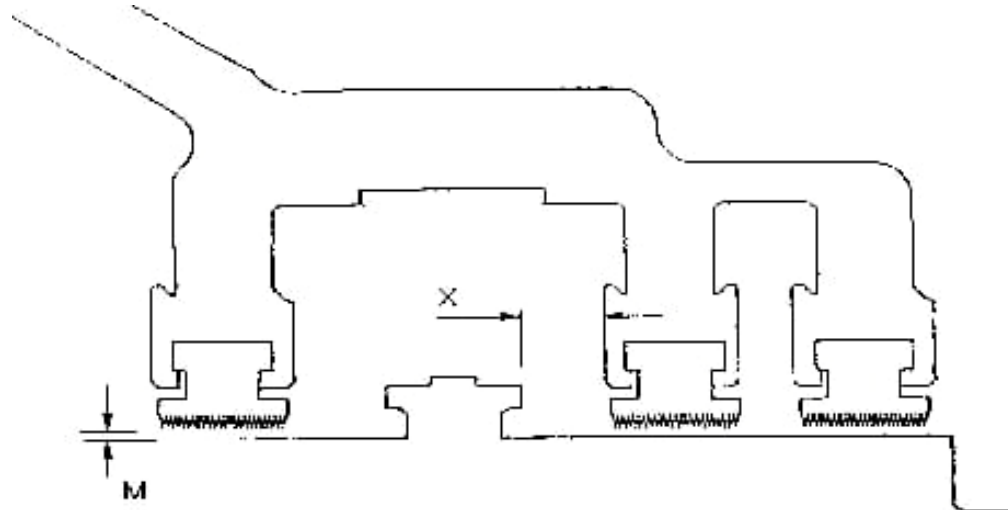
Reviewed by Eng:  
 Date:

**HP STEAM GLAND (EX PADDLE WHEEL)  
CLEARANCES (EXHAUST) (SUNDANCE)**

Ref #.

|                                      |                   |            |                  |                           |               |                       |                  |
|--------------------------------------|-------------------|------------|------------------|---------------------------|---------------|-----------------------|------------------|
| CLIENT                               | <b>NS Power</b>   |            | ORDER No.        | READINGS TAKEN BY: Dave M | DATE:         | WP/ITP REF#           | IR SHEET REF.    |
| LOCATION                             | <b>Tufts Cove</b> |            | PROOF READ BY:   | SUPERVISED BY: A. Molnar  | Dec 01/25     | P-EFP-3083.01-0001-02 | <b>GL.O.501b</b> |
| STATUS WHEN INSPECTED<br><br>As Left |                   | UNIT No. 1 | INSTRUMENT TYPE: |                           | CAL DUE DATE: |                       | COMPONENT ID No. |
|                                      |                   | M/C No.    | INSTRUMENT No.   |                           |               |                       |                  |

NOTE: ALL CLEARANCES TAKEN WITH ROTOR IN RUNNING POSITION, MINIMUM CLEARANCE TO BE RECORDED



| HP INLET GLAND |        |        |        |       |       |
|----------------|--------|--------|--------|-------|-------|
| POSITION       |        | DESIGN | ACTUAL |       |       |
|                |        |        | N1     | N2    | N3    |
| M              | TOP    |        | 0.036  | 0.037 | 0.037 |
|                | BOTTOM |        | 0.010  | 0.010 | 0.023 |
|                | LHS    |        | 0.025  | 0.024 | 0.024 |
|                | RHS    |        | 0.024  | 0.023 | 0.019 |
| X              |        |        |        |       |       |

REMARKS:

**SIEMENS**  
energy

Reviewed by TFA: Matthew Ryan  
 Disposition Required Y/N  
 Ref#  
 Verified by QA: Matthew Ryan, o=Siemens Energy, email=matthew.ryan@siemens-energy.com  
 Date: 2025.02.11 09:07:04:00'

Reviewed by Eng:

Date:

**HP STEAM GLAND (EX PADDLE WHEEL)  
CLEARANCES (INLET) (SUNDANCE)**

Ref #.

|                                   |                |                  |                              |               |                       |                  |
|-----------------------------------|----------------|------------------|------------------------------|---------------|-----------------------|------------------|
| CLIENT<br>NS Power                | ORDER No.      |                  | READINGS TAKEN BY: D. Palmer | DATE:         | WP/ITP REF#           | IR SHEET REF.    |
| LOCATION<br>Tufts Cove            | PROOF READ BY: |                  | SUPERVISED BY: A. Molnar     | Oct 24/25     | P-EFP-3083.01-0001-03 |                  |
| STATUS WHEN INSPECTED<br>As Found | UNIT No. 1     | INSTRUMENT TYPE: | Feeler gauges                | CAL DUE DATE: |                       | COMPONENT ID No. |
|                                   | M/C No.        | INSTRUMENT No.   |                              |               |                       |                  |

LH HP  
ESV

LH  
GOV P1

LH  
GOV P2

LH RH  
ESV

0.007

LH RH  
ICV

0.012
0.000

0.000

RH HP  
ESV

RH  
GOV P1

RH  
GOV P2

RH RH  
ESV

0.013

RH RH  
ICV

0.017
0.000

0.006

|                                                                                     |                                                                      |                                                                                                                 |                               |                                                        |                         |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------|--------------------------------------------------------|-------------------------|
|  | Reviewed by TFA:<br>Matthew Ryan<br>Disposition Required Y/N<br>Ref# | Verified by QA:<br>Matthew Ryan, o=Siemens Energy,<br>email=matthew.ryan@siemens-energy.com<br>Date: 11/03/2024 | Reviewed by Eng:<br><br>Date: | <b>VALVE COVER TO VALVE BODY<br/>CLEARANCE (TIGHT)</b> | <b>Ref #.</b><br><br>70 |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------|--------------------------------------------------------|-------------------------|

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |                                                                                                                                                                                                                                                                |                                                                                                                  |                           |                                |                              |                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------------------|------------------------------|---------------------------------|
| CLIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>NS Power</b>   |                                                                                                                                                                                                                                                                | ORDER No.                                                                                                        | READINGS TAKEN BY:        | DATE:                          | WP/ITP REF#                  | IR SHEET REF.                   |
| LOCATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Tufts Cove</b> |                                                                                                                                                                                                                                                                | PROOF READY BY:                                                                                                  | SUPERVISED BY:            | Nov 3/25                       | <b>P-EFP-3083.01-0001-03</b> | <b>MI.O.01</b>                  |
| STATUS WHEN INSPECTED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                   | UNIT No.                                                                                                                                                                                                                                                       | 1                                                                                                                | INSTRUMENT TYPE:          | CAL DUE DATE:                  |                              | COMPONENT ID No.                |
| <b>As Left</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                   | M/C No.                                                                                                                                                                                                                                                        |                                                                                                                  | INSTRUMENT No.            |                                |                              |                                 |
| <p>Disassembly</p> <ul style="list-style-type: none"> <li>- I&amp;C removed connections to instrumentation and limit switches</li> <li>- Unbolted and removed oil piping</li> <li>- Unbolted and removed valve relay</li> <li>- Recorded valve cover gaps</li> <li>- Unbolted and removed valve leak off piping</li> </ul> <p>At this point the valve scope was postponed to a later outage as the customer did not order any replacement valve heads.</p> <p>Assembly</p> <ul style="list-style-type: none"> <li>- Installed valve leak off piping</li> <li>- Installed valve relay</li> <li>- Installed oil piping</li> <li>- I&amp;C restored connections to instrumentation and limit switches</li> </ul> |                   |                                                                                                                                                                                                                                                                |                                                                                                                  |                           |                                |                              |                                 |
| REMARKS:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                   |                                                                                                                                                                                                                                                                |                                                                                                                  |                           |                                |                              |                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                   | Reviewed by TFA:<br><b>Matthew Ryan</b><br><small>Matthew Ryan, o=Siemens Energy, email=matthew.ryan@siemens-energy.com</small><br>Disposition Required: <input checked="" type="checkbox"/> N <input type="checkbox"/> A <input type="checkbox"/> R<br>Ref #. | Verified by QA:<br><small>Matthew Ryan, o=Siemens Energy, email=matthew.ryan@siemens-energy.com</small><br>Date: | Reviewed by Eng:<br>Date: | <b>LHS ICV Summary of Work</b> |                              | Ref #.<br><b>75</b><br>Sheet of |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |                                                                               |                                                                                                     |                           |                                |                              |                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------------|--------------------------------|------------------------------|---------------------------------|
| CLIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>NS Power</b>   |                                                                               | ORDER No.                                                                                           | READINGS TAKEN BY:        | DATE:                          | WP/ITP REF#                  | IR SHEET REF.                   |
| LOCATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Tufts Cove</b> |                                                                               | PROOF READY BY:                                                                                     | SUPERVISED BY:            | Nov 3/25                       | <b>P-EFP-3083.01-0001-03</b> | <b>MI.O.01</b>                  |
| STATUS WHEN INSPECTED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                   | UNIT No.                                                                      | 1                                                                                                   | INSTRUMENT TYPE:          | CAL DUE DATE:                  |                              | COMPONENT ID No.                |
| <b>As Left</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                   | M/C No.                                                                       |                                                                                                     | INSTRUMENT No.            |                                |                              |                                 |
| <p>Disassembly</p> <ul style="list-style-type: none"> <li>- I&amp;C removed connections to instrumentation and limit switches</li> <li>- Unbolted and removed oil piping</li> <li>- Unbolted and removed valve relay</li> <li>- Recorded valve cover gaps</li> <li>- Unbolted and removed valve leak off piping</li> </ul> <p>At this point the valve scope was postponed to a later outage as the customer did not order any replacement valve heads.</p> <p>Assembly</p> <ul style="list-style-type: none"> <li>- Installed valve leak off piping</li> <li>- Installed valve relay</li> <li>- Installed oil piping</li> <li>- I&amp;C restored connections to instrumentation and limit switches</li> </ul> |                   |                                                                               |                                                                                                     |                           |                                |                              |                                 |
| REMARKS:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                   |                                                                               |                                                                                                     |                           |                                |                              |                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                   | Reviewed by TFA:<br><b>Matthew Ryan</b><br>Disposition Required Y/N<br>Ref #. | Verified by QA:<br>Matthew Ryan, o-Siemens Energy<br>email=matthew.ryan@siemens-energy.com<br>Date: | Reviewed by Eng:<br>Date: | <b>RHS ICV Summary of Work</b> |                              | Ref #.<br><b>79</b><br>Sheet of |



Siemens Energy Canada Limited  
1577 North Service Road East  
Oakville, Ontario, L6H 0H6  
GST/HST #: 772310736 RT0001

**BILL TO** (635927)

NOVA SCOTIA POWER INC  
1894 BARRINGTON ST  
HALIFAX NS B3J 2W5

**SOLD TO** (635927)

NOVA SCOTIA POWER INC  
1894 BARRINGTON ST  
HALIFAX NS B3J 2W5

**SHIP TO:** (18567)

NOVA SCOTIA POWER INC, AN EMER  
TUFTS COVE GENERATING STN  
315 WINDMILL RD  
DARTMOUTH NS B3A 1H3

**INVOICE**

|                                          |                          |
|------------------------------------------|--------------------------|
| <b>PLEASE REMIT PAYMENTS TO:</b>         |                          |
| Siemens Energy Canada Limited            |                          |
|                                          |                          |
| <b>INVOICE NO.</b>                       | <b>DATE</b>              |
| 477X 55035286                            | 28-Nov-2025              |
| <b>CUSTOMER PO#</b>                      | <b>DELIVERY NOTE NO.</b> |
| 2180463                                  |                          |
| <b>WAYBILL / CARRIER NAME</b>            |                          |
|                                          |                          |
| <b>SIEMENS ORDER NO.</b>                 | <b>ORDER DATE</b>        |
| 1787053                                  | 05-Jun-2025              |
| energycollections.ca@siemens-energy.com  |                          |
|                                          |                          |
| <b>A/R CONTACT TEL. NO.</b>              | <b>A/R CONTACT FAX</b>   |
|                                          |                          |
| <b>TAX EXEMPTION/REGISTRATION NO(s):</b> |                          |
|                                          |                          |

| ITEM | MATERIAL          | QTY                  | DESCRIPTION                | PRICE | PRICE UNIT | VALUE |
|------|-------------------|----------------------|----------------------------|-------|------------|-------|
| 10   | JZZ:SERVICE_STEAM | TUC1 O25-Preplanning |                            |       |            |       |
|      | 1 EA              |                      |                            | CAD   | 1 EA       |       |
|      | Billing #1        |                      |                            |       |            |       |
|      | ECL: 9X9999       | ECCN: 9X9999         | Country of Origin: Unknown |       |            |       |
| 20   | JZZ:SERVICE_STEAM | TUC1 O25-TFA Onsite  |                            |       |            |       |
|      | 1 EA              |                      |                            | CAD   | 1 EA       |       |
|      | Billing #1        |                      |                            |       |            |       |
|      | ECL: 9X9999       | ECCN: 9X9999         | Country of Origin: Unknown |       |            |       |

**NOTE:**

A service charge of 2% per month  
(26.8% per annum) is payable on balances.

**PAYMENT TERMS:** (Within 35 days Due net)

Net Amount Due 02-Jan-2026



Siemens Energy Canada Limited  
1577 North Service Road East  
Oakville, Ontario, L6H 0H6  
GST/HST #: 772310736 RT0001

# INVOICE

| PLEASE REMIT PAYMENTS TO:     |                   |
|-------------------------------|-------------------|
| Siemens Energy Canada Limited |                   |
|                               |                   |
| INVOICE NO.                   | DATE              |
| 477X 55035286                 | 28-Nov-2025       |
| CUSTOMER PO#                  | DELIVERY NOTE NO. |
| 2180463                       |                   |

| ITEM | MATERIAL | QTY | DESCRIPTION | PRICE | PRICE UNIT | VALUE |
|------|----------|-----|-------------|-------|------------|-------|
|------|----------|-----|-------------|-------|------------|-------|

Items total

HST

14.000 %

Final Net Amount:

CAD

These items are controlled by the U.S. Government (when labeled with "ECCN" unequal "N") and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. Government or as otherwise authorized by U.S. law and regulations. Items labeled with "ECL unequal "N" are subject to Canadian export authorization when being exported out of Canada. Items without label or with label "ECL:N" / "ECCN:N" or label "ECL:9X9999 / ECCN: 9X9999", may require authorization from responsible authorities depending on the final end-use, or the destination. Further, depending on the origin of the products and destination, additional Canadian export control regulations may apply.

**Note: Call your A/R Contact to discuss ways to streamline your payment process ... it can save your company time and money.**

Beck  
Christin

Digitally signed by Beck Christin  
DN: cn=Beck Christin, o=Siemens,  
email=christin.beck@siemens-  
energy.com  
Date: 2025.11.28 16:52:38 -05'00'

**Nova Scotia Power Inc-TUC1 Outage Support Fall 2025**  
**PO# 4500559485 PO Item 1**  
**SECL Job# P-EFP-3083/1787053**  
**Billing #1**

*Preplanning*

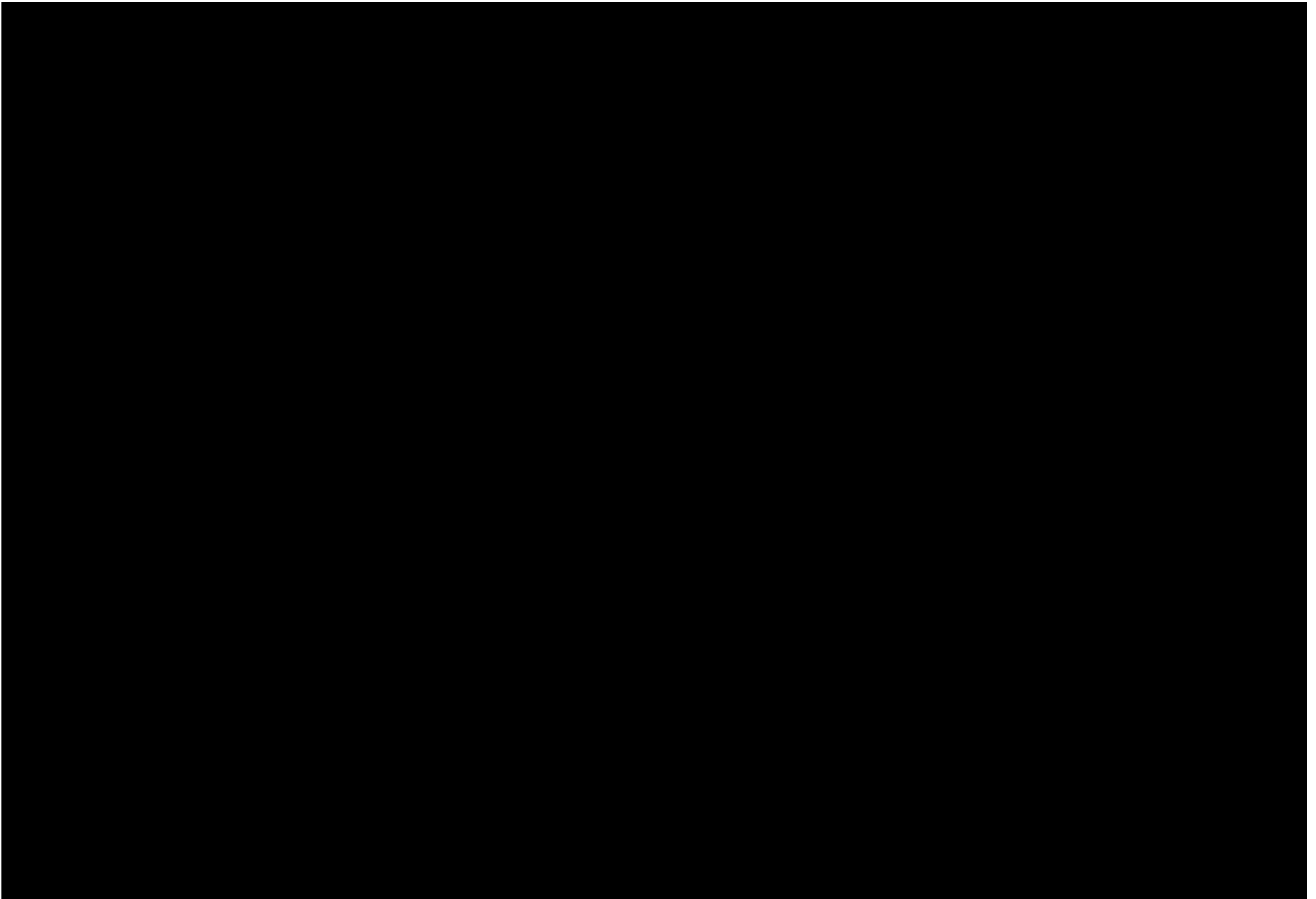


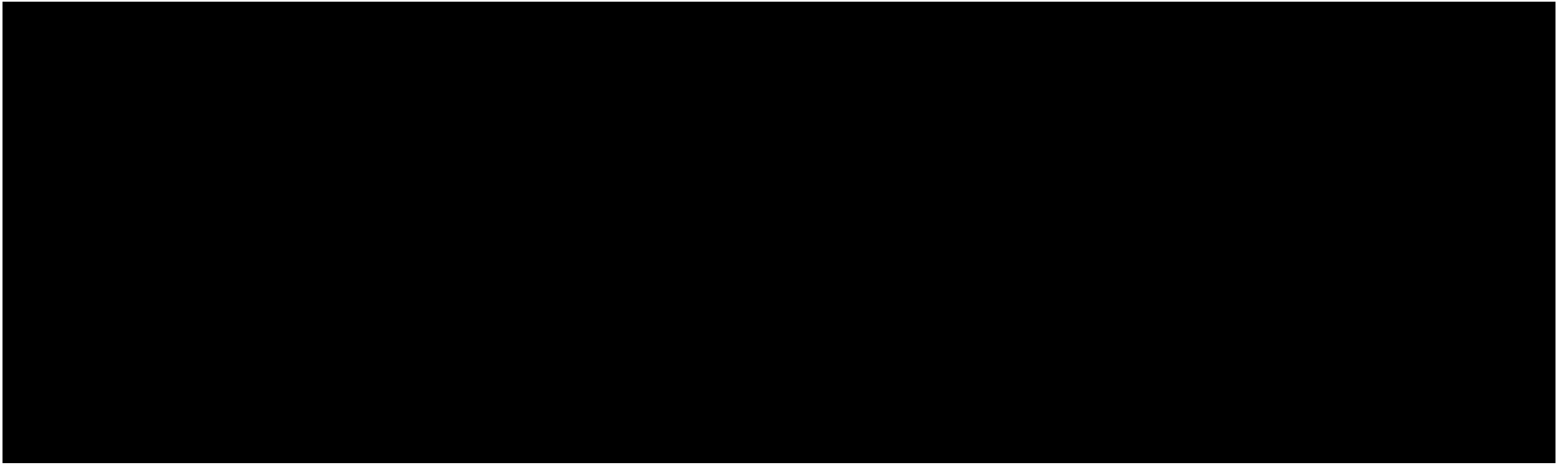
*Onsite*

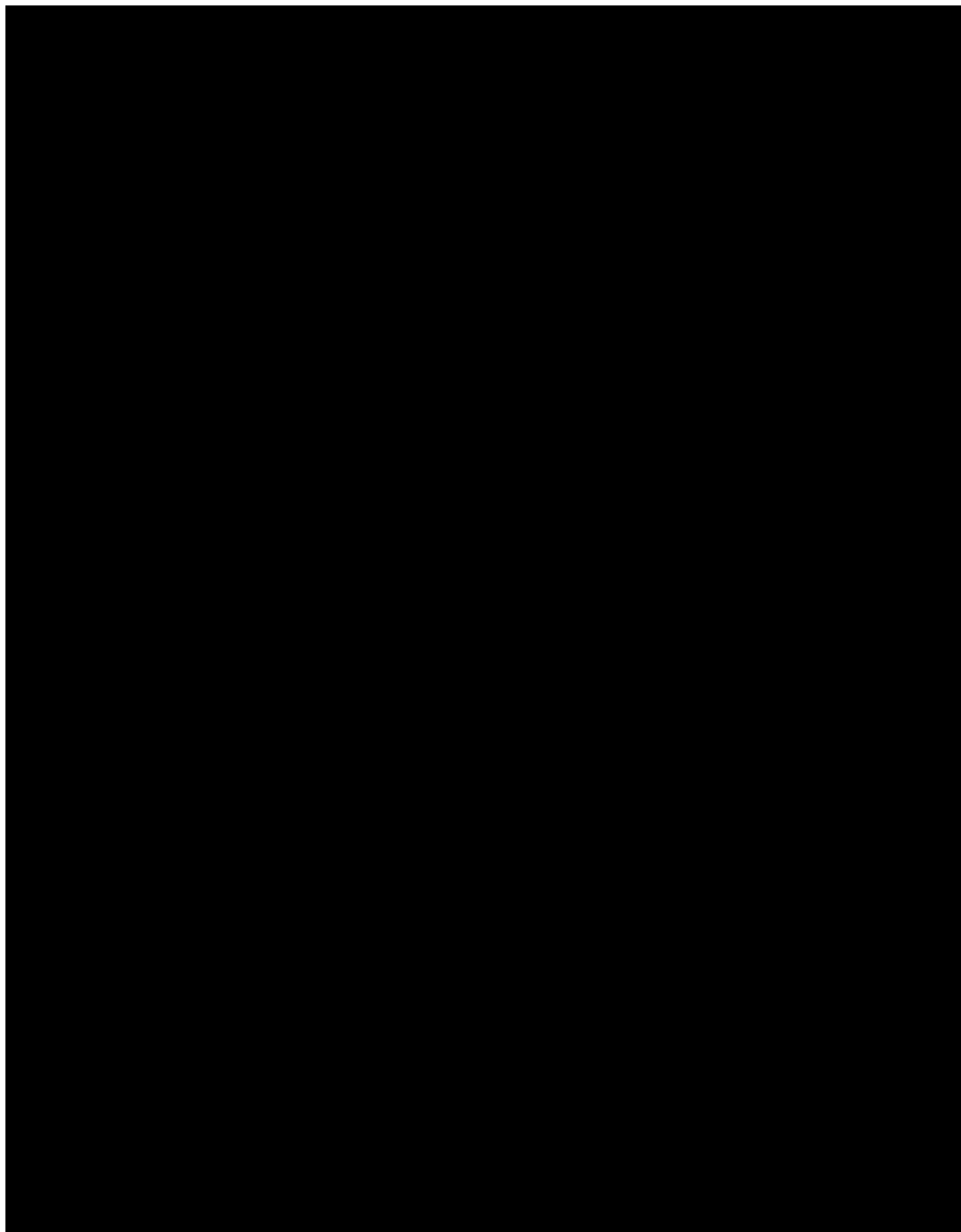


Beck  
Christin

Digitally signed by Beck Christin  
DN: cn=Beck Christin, o=Siemens,  
email=christin.beck@siemens-  
energy.com  
Date: 2025.11.28 16:43:24 -05'00'









Siemens Energy Canada Limited  
1577 North Service Road East  
Oakville, Ontario, L6H 0H6  
GST/HST #: 772310736 RT0001

**BILL TO (635927)**

NOVA SCOTIA POWER INC  
1894 BARRINGTON ST  
HALIFAX NS B3J 2W5

**SOLD TO (635927)**

NOVA SCOTIA POWER INC  
1894 BARRINGTON ST  
HALIFAX NS B3J 2W5

**SHIP TO: (18567)**

NOVA SCOTIA POWER INC, AN EMER  
TUFTS COVE GENERATING STN  
315 WINDMILL RD  
DARTMOUTH NS B3A 1H3

**INVOICE**

|                                          |                          |
|------------------------------------------|--------------------------|
| <b>PLEASE REMIT PAYMENTS TO:</b>         |                          |
| Siemens Energy Canada Limited            |                          |
|                                          |                          |
| <b>INVOICE NO.</b>                       | <b>DATE</b>              |
| 477X 55035323                            | 16-Jan-2026              |
| <b>CUSTOMER PO#</b>                      | <b>DELIVERY NOTE NO.</b> |
| 2180463                                  |                          |
| <b>WAYBILL / CARRIER NAME</b>            |                          |
|                                          |                          |
| <b>SIEMENS ORDER NO.</b>                 | <b>ORDER DATE</b>        |
| 1787053                                  | 05-Jun-2025              |
| energycollections.ca@siemens-energy.com  |                          |
|                                          |                          |
| <b>A/R CONTACT TEL. NO.</b>              | <b>A/R CONTACT FAX</b>   |
|                                          |                          |
| <b>TAX EXEMPTION/REGISTRATION NO(s):</b> |                          |
|                                          |                          |

| ITEM | MATERIAL                  | QTY | DESCRIPTION                                                                                                   | PRICE | PRICE UNIT | VALUE |
|------|---------------------------|-----|---------------------------------------------------------------------------------------------------------------|-------|------------|-------|
| 20   | JZZ:SERVICE_STEAM<br>1 EA |     | TUC1 O25-TFA Onsite                                                                                           |       |            |       |
|      | ECL: 9X9999 ECCN: 9X9999  |     | Country of Origin: Unknown                                                                                    |       |            |       |
| 30   | JZZ:SERVICE_STEAM<br>1 EA |     | TUC1 O25-SSB                                                                                                  |       |            |       |
|      | ECL: 9X9999 ECCN: 9X9999  |     | Country of Origin: Unknown                                                                                    |       |            |       |
| 40   | JZZ:SERVICE_STEAM<br>1 EA |     | TUC1 O25-SUB                                                                                                  |       |            |       |
|      | ECL: 9X9999 ECCN: 9X9999  |     | Country of Origin: Unknown                                                                                    |       |            |       |
| 70   | JZZ:SERVICE_STEAM<br>1 EA |     | TUC1 O25-Transportation                                                                                       |       |            |       |
|      |                           |     | Transportation charges for shipment of tooling back to US still to be invoiced.-not included in this invoice. |       |            |       |
|      | ECL: 9X9999 ECCN: 9X9999  |     | Country of Origin: Unknown                                                                                    |       |            |       |

**NOTE:**

A service charge of 2% per month  
(26.8% per annum) is payable on balances.

**PAYMENT TERMS: (Within 35 days Due net)**

Net Amount Due 20-Feb-2026



Siemens Energy Canada Limited  
1577 North Service Road East  
Oakville, Ontario, L6H 0H6  
GST/HST #: 772310736 RT0001

# INVOICE

| PLEASE REMIT PAYMENTS TO:     |                   |
|-------------------------------|-------------------|
| Siemens Energy Canada Limited |                   |
| [REDACTED]                    |                   |
| INVOICE NO.                   | DATE              |
| 477X 55035323                 | 16-Jan-2026       |
| CUSTOMER PO#                  | DELIVERY NOTE NO. |
| 2180463                       |                   |

| ITEM | MATERIAL | QTY | DESCRIPTION | PRICE | PRICE UNIT | VALUE |
|------|----------|-----|-------------|-------|------------|-------|
|------|----------|-----|-------------|-------|------------|-------|

|    |                   |              |                                       |  |     |  |
|----|-------------------|--------------|---------------------------------------|--|-----|--|
| 80 | JZZ:SERVICE_STEAM |              | TUC2 O25-EWA 2-Laser Scan In Cylinder |  |     |  |
|    |                   | 1 EA         |                                       |  | CAD |  |
|    | ECL: 9X9999       | ECCN: 9X9999 | Country of Origin: Unknown            |  |     |  |

## Items total

|                          |          |     |  |
|--------------------------|----------|-----|--|
| HST                      | 14.000 % |     |  |
| <b>Final Net Amount:</b> |          | CAD |  |

These items are controlled by the U.S. Government (when labeled with "ECCN" unequal "N") and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. Government or as otherwise authorized by U.S. law and regulations. Items labeled with "ECL unequal "N" are subject to Canadian export authorization when being exported out of Canada. Items without label or with label "ECL:N" / "ECCN:N" or label "ECL:9X9999 / ECCN: 9X9999", may require authorization from responsible authorities depending on the final end-use, or the destination. Further, depending on the origin of the products and destination, additional Canadian export control regulations may apply.

**Note: Call your A/R Contact to discuss ways to streamline your payment process ... it can save your company time and money.**

Sokoloski  
Nikolas

Digitally signed by Sokoloski Nikolas  
DN: cn=Sokoloski Nikolas,  
o=Siemens,  
email=nikolas.sokoloski@siemens-  
energy.com  
Date: 2026.01.16 15:45:53 -05'00'

Nova Scotia Power Inc-TUC1 Outage Support Fall 2025

PO# 2180463

SECL Job# P-EFP-3083/1787053

Billing #2

*Onsite (P-EFP-3083.02)*

[REDACTED]

*Slow Speed Balance (P-EFP-3083.03)*

[REDACTED]

*Start Up Support (P-EFP-3083.04)*

[REDACTED]

*Transportation (P-EFP-3083.06)*

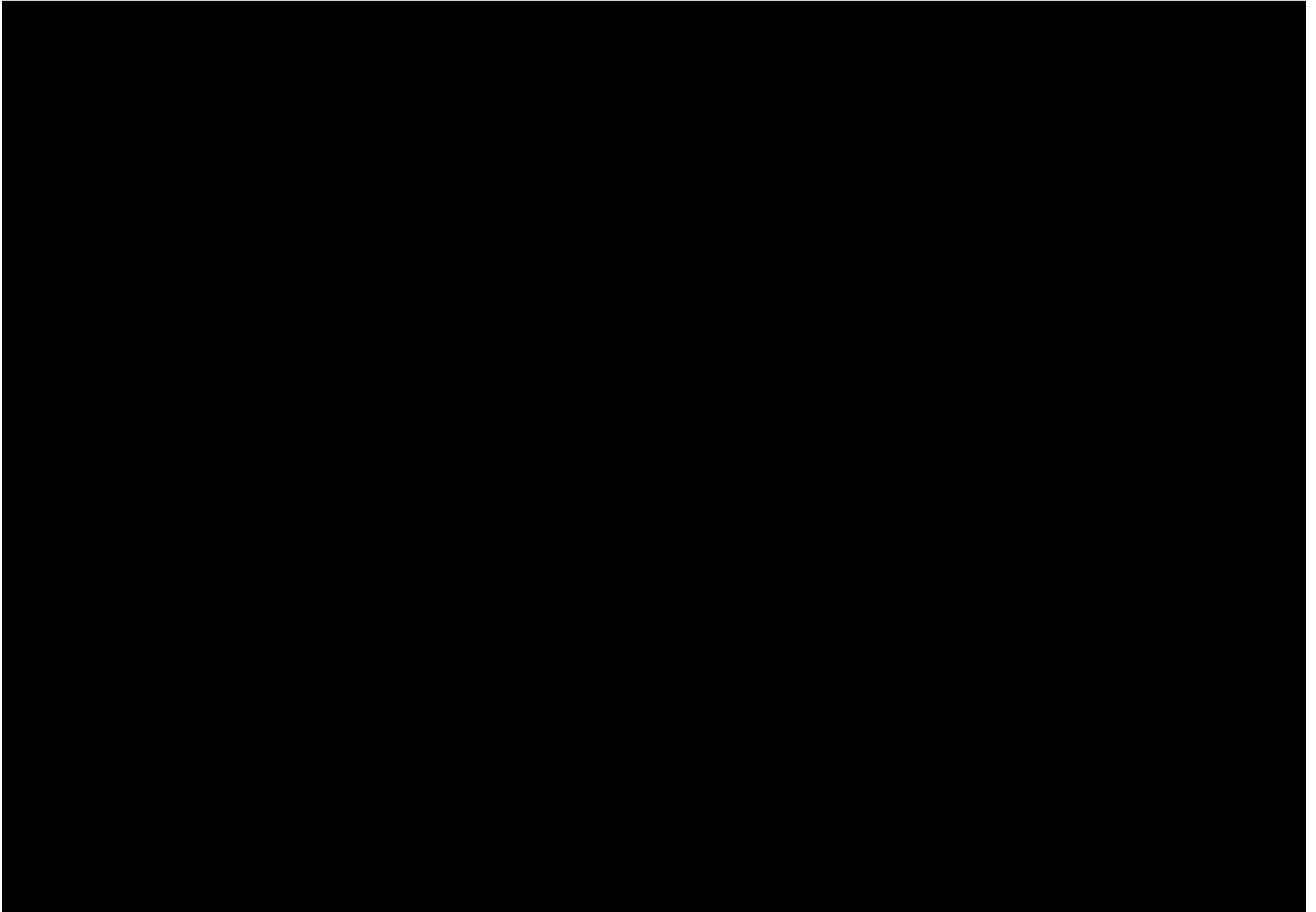
[REDACTED]

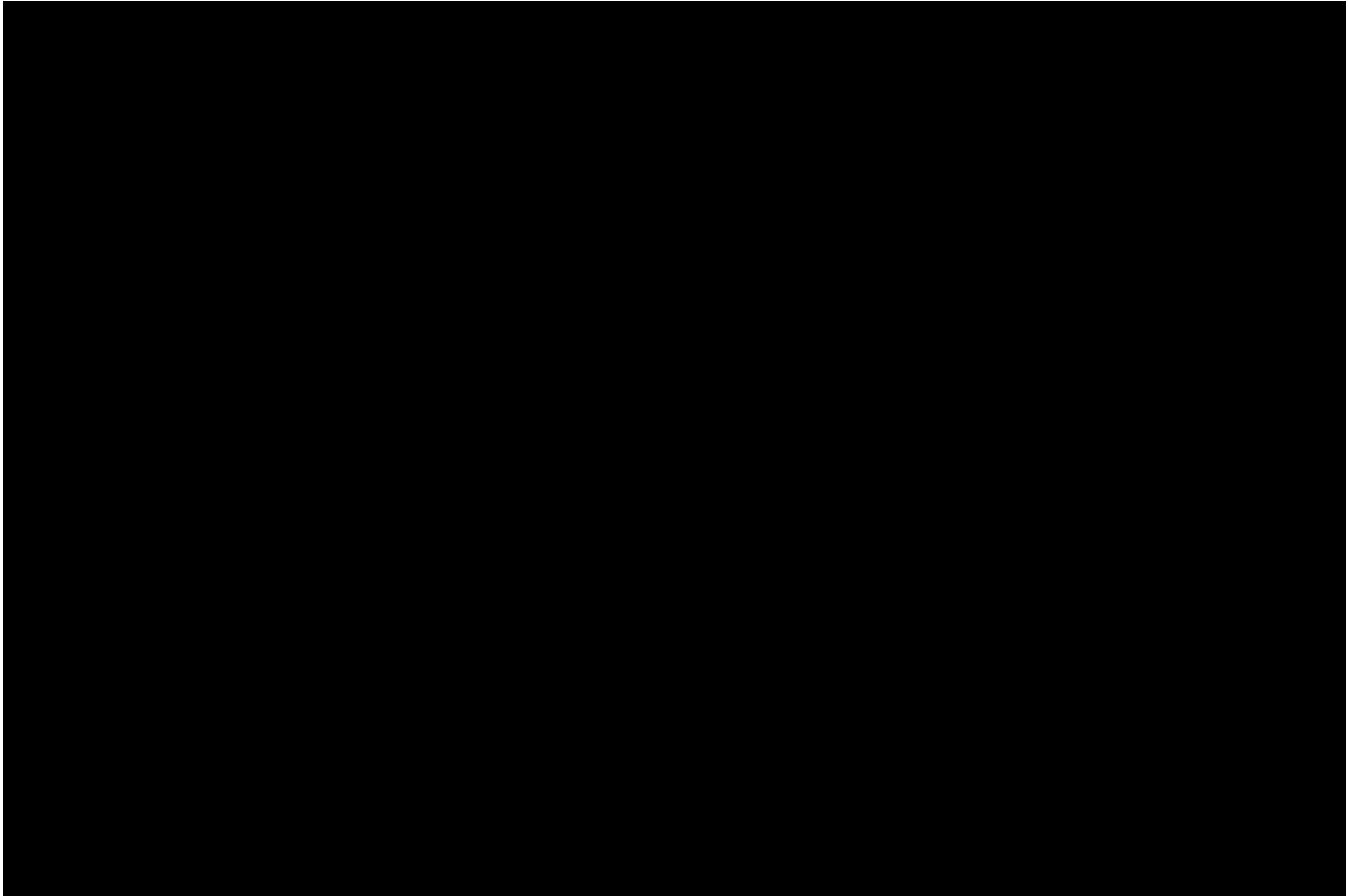
*EWA#2-Laser Scan for Inner Cylinder (P-EFP-3083.08)*

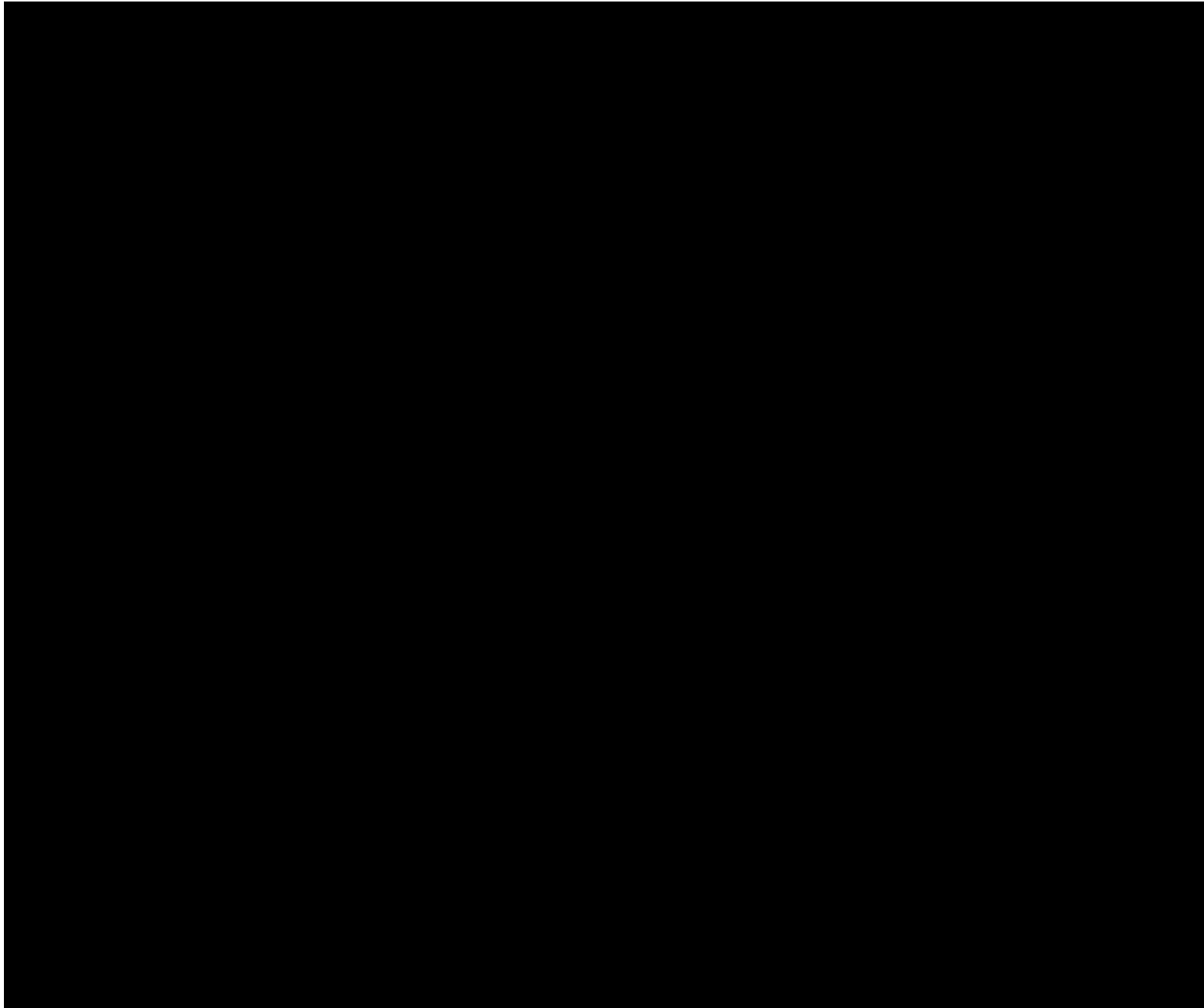
[REDACTED]

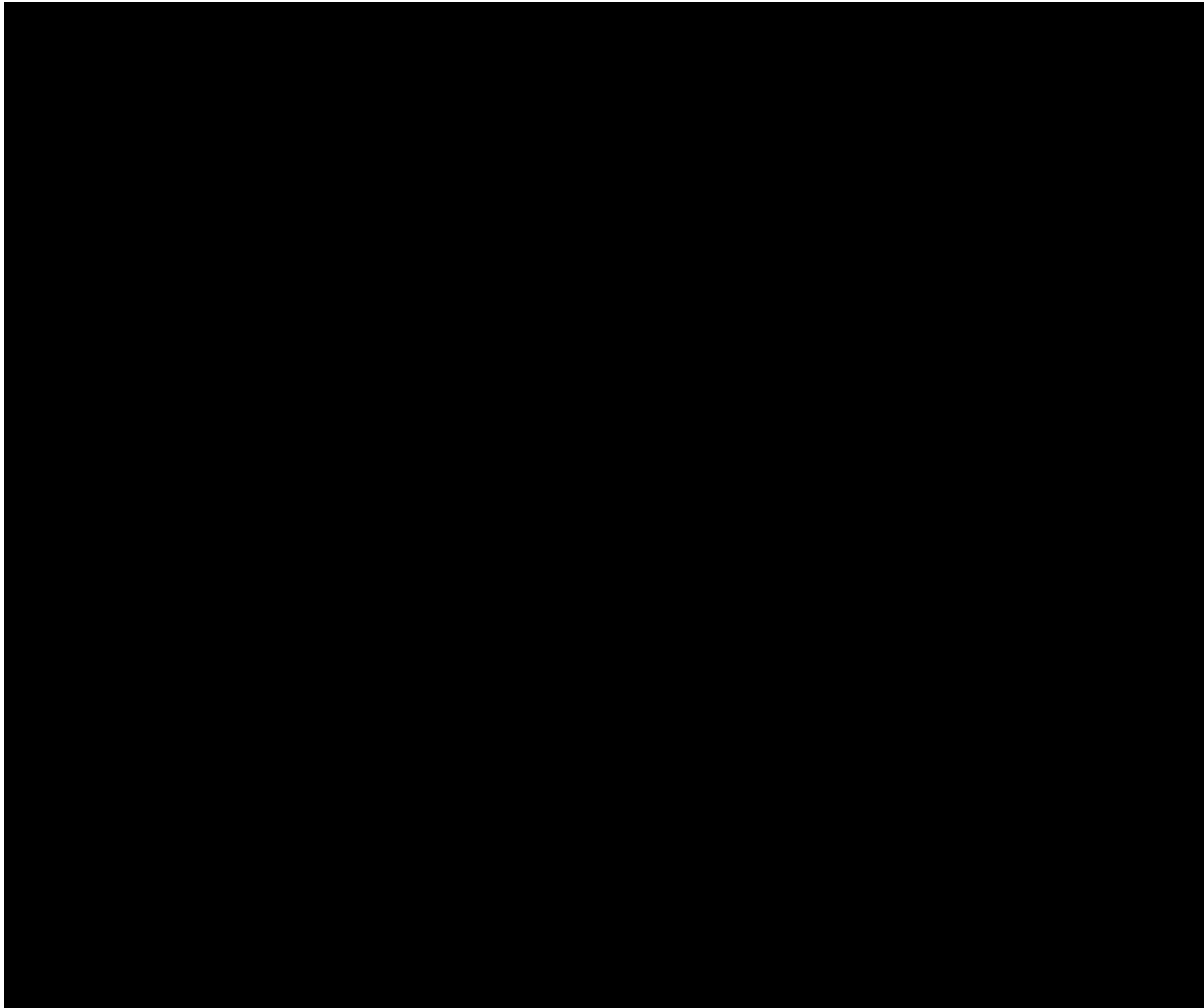
Sokoloski  
Nikolas

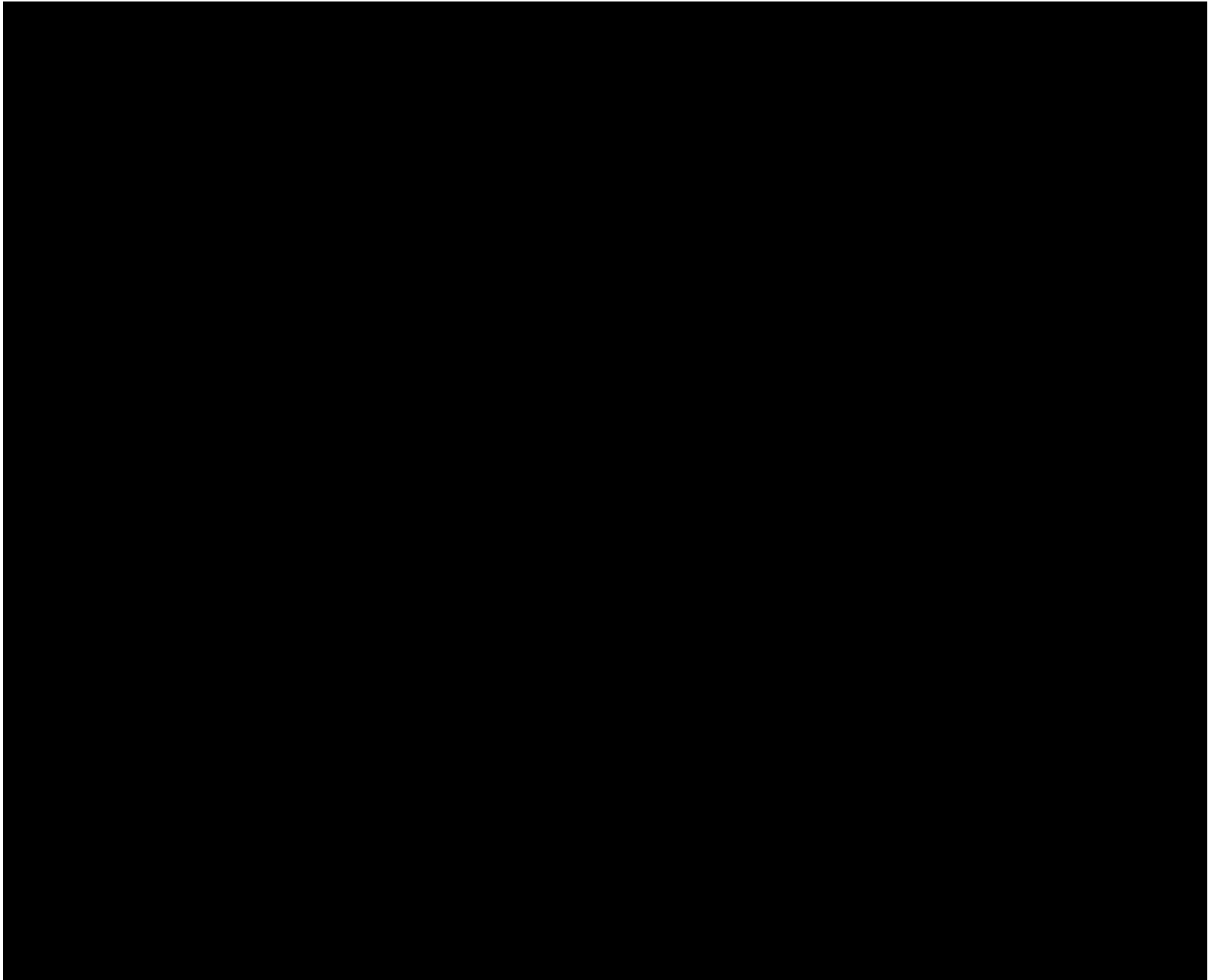
Digitally signed by Sokoloski Nikolas  
DN: cn=Sokoloski Nikolas,  
o=Siemens,  
email=nikolas.sokoloski@siemens-  
energy.com  
Date: 2028.01.16 14:26:28 -05'00'

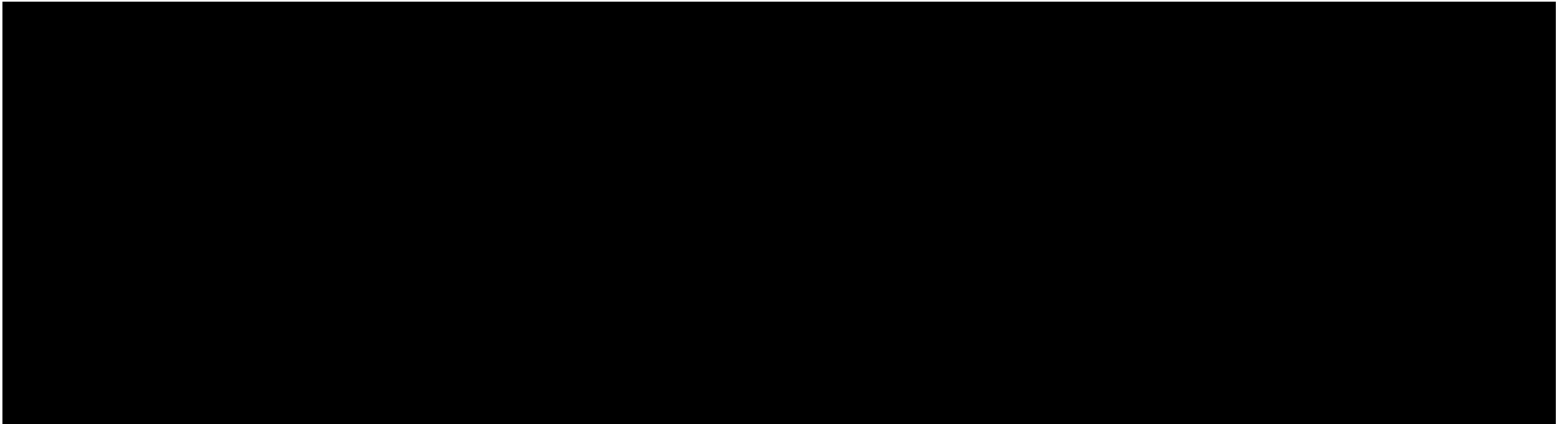


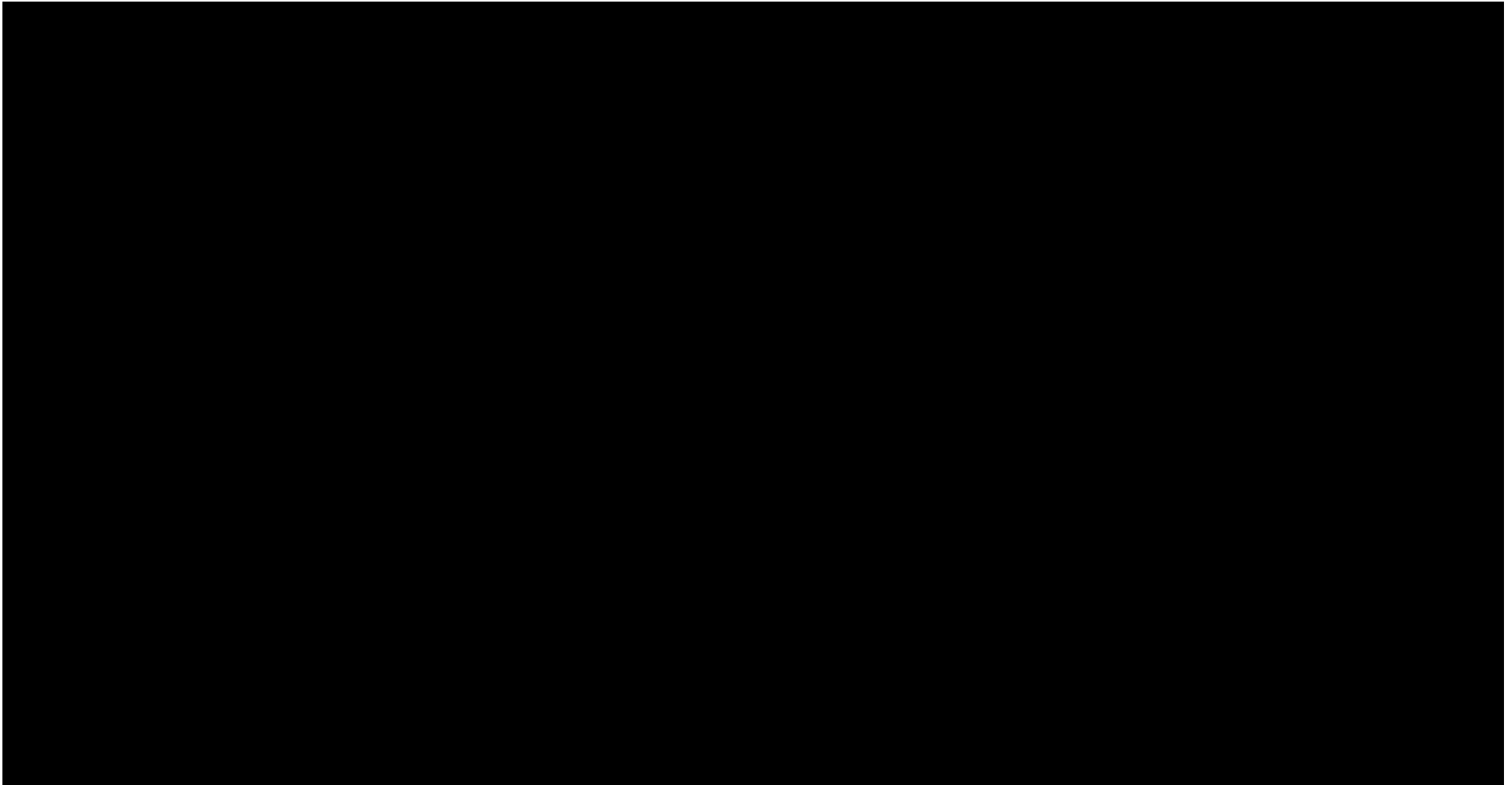


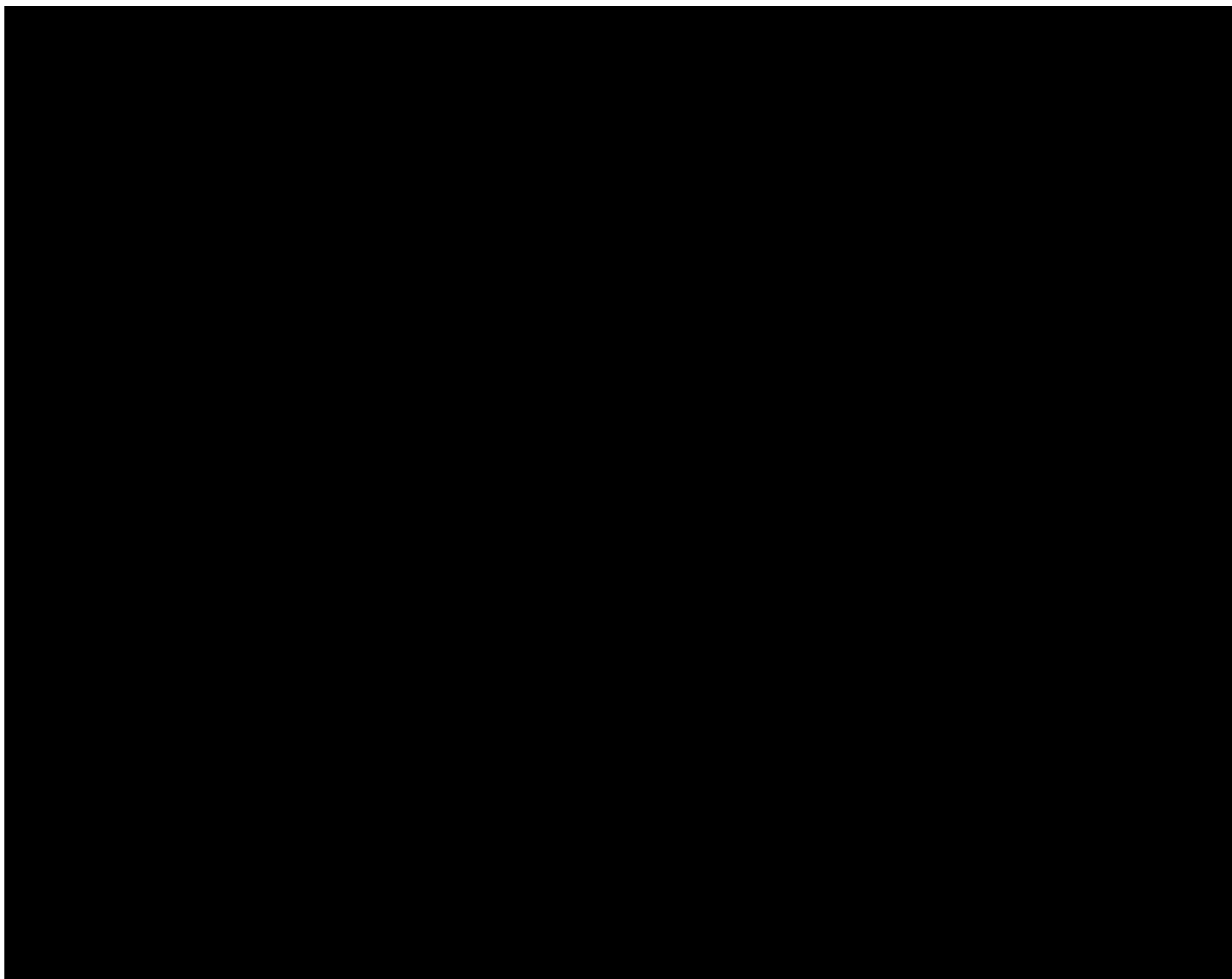












**REDACTED (CONFIDENTIAL INFORMATION REMOVED)**

**CI C0080150 05 Attachment 3 Cost Support 3 has been removed due to confidentiality.**