

Ref.: EPEC/GG/UNEW/EVENGENCO3**Date: 03/08/2026****To: Power Generation Corporation 3, Joint Stock Company (EVNGENCO3)**

Phu My 2.1 Power Plant

Socialist Republic of Vietnam

Attn: Bid Evaluation Committee / Technical Evaluation Committee

Subject: Reference and confirmation of in-service performance of compressor blading manufactured and supplied by UNEW, Inc. and installed in gas turbine unit GT12, Central Térmica Bicentenario, Pilar, Córdoba, Argentina

Dear Sirs,

The Empresa Provincial de Energía de Córdoba (EPEC) is the provincial electricity utility of the Province of Córdoba, Argentina, and is the owner and operator of the Central Térmica Bicentenario at Pilar, Córdoba. The plant operates two Siemens SGT5-2000E / V94.2 gas turbine generating units, designated GT11 and GT12, together with one steam turbine generator in a combined cycle configuration, with a total installed capacity of 466 MW dispatched to the Argentine interconnected system.

This letter is issued at the request of UNEW, Inc. and confirms the supply, installation, inspection findings, and in-service performance of the complete compressor blading manufactured by UNEW, Inc. and installed in gas turbine unit GT12 of this plant.

1. Unit and Equipment Identification

Unit and Equipment Identification	
Plant	Central Térmica Bicentenario (Central Bicentenario)
Plant owner and operator	Empresa Provincial de Energía de Córdoba (EPEC)
Plant location	Ruta Provincial 13, km 4.5, Pilar, Departamento Río Segundo, Province of Córdoba, Argentina
Unit	GT12 / TG12 (also identified as Pilar #2)
Gas turbine model	Siemens SGT5-2000E / V94.2 (Si3D configuration)
Gas turbine serial number	800784
Generator model and serial number	Siemens SGen5-1000A, S/N 1007463
Unit rating	168 MW nominal, 3,000 rpm, 50 Hz
Fuel	Natural gas, with distillate as back-up fuel
Operating regime	Combined cycle and open cycle operation, dispatched to the Sistema Argentino de Interconexión (SADI) under CAMMESA

2. Supply and Installation of the UNEW Compressor Blading

During the major outage of October and November 2018, unit GT12 was upgraded from the original Siemens V94.2 configuration to the Si3D configuration. As part of that work the complete axial compressor blading of the unit, rows 1 through 16, was removed and replaced with new compressor blading manufactured and supplied by UNEW, Inc.

The replacement covered every compressor row of the machine without exception, comprising both the standard compressor blades and the locking compressor blades of each of the sixteen rows. No original compressor blading was

retained in the unit. The part numbers, purchase order numbers, and individual serial numbers of the blading supplied are recorded in the delivery documentation and are listed in Annex A to this letter.

Supply and Installation Record	
Supplier and manufacturer	UNEW, Inc., 2570 N First Street, 2nd Floor, San Jose, California 95131, United States of America
Scope supplied	Complete compressor blading for the axial compressor of unit GT12, rows 1 to 16, comprising standard compressor blades and locking compressor blades for every row
Line items and quantity	32 line items covering 16 compressor rows; complete set for the unit
Commercial reference	Purchase Order EI-UNEW-PO-2017-0206 dated 6 February 2017, under Contract UNEW-ELEC-2016-001
Delivery reference	Delivery Note DN-EI-UNEW-2018-0402 dated 2 April 2018
Installation	Installed in unit GT12 during the outage of October and November 2018, completed November 2018
Configuration change	Installed as part of the conversion of the unit from the original V94.2 configuration to the Si3D configuration, in which the complete compressor blading and the complete turbine vane and blade rows 1 to 4 were renewed
Return to commercial service	November 2018

3. Service Record and Operating Experience

Unit GT12 returned to commercial service in November 2018 with the UNEW compressor blading installed and has since been dispatched in normal commercial operation, in both combined cycle and open cycle modes, under the dispatch instructions of CAMMESA.

Over the period from installation to the present date, EPEC has recorded no failure, no liberation, no cracking, no distortion, no abnormal wear, no rub event, and no other defect attributable to the compressor blading supplied by UNEW, Inc. No forced outage, no load restriction, and no derating of unit GT12 has been caused by or attributed to these components at any time since their installation. No compressor blade supplied by UNEW, Inc. has been removed, repaired, or replaced.

Period / Event	Date	Record
Installation to first inspection	November 2018 to 14 November 2022	Approx. 32,000 operating hours / approx. 33,000 EOH accumulated on the installed capital parts
Inspection performed	16 October 2022 to 14 November 2022	33,000-hour Hot Gas Path Inspection (HGPI) on unit GT12
Compressor blading finding at HGPI	14 November 2022	Compressor blade rows 1 to 16 inspected in place. Leading edges, trailing edges, airfoil surfaces, platforms, tips, and flow path areas examined. All accessible rows found in good and acceptable condition and certified suitable for continued operation without replacement
Disposition	14 November 2022	Compressor blading left installed in the machine. No row removed, no blade replaced, no repair required
Second service interval	November 2022 to date	The same compressor blading has accumulated a further approx. 33,000 EOH in continuous commercial service in unit GT12, with no removal, no repair, and no replacement of any blade

Period / Event	Date	Record
Cumulative service on the blading	November 2018 to date	Approx. 66,000 Equivalent Operating Hours accumulated on the UNEW compressor blading since installation, over two complete inspection intervals
Total elapsed service	November 2018 to date	In excess of seven (7) years of continuous commercial service
Next scheduled inspection	September 2026	Unit GT12 is scheduled for Major Inspection (MI). The unit is entering this outage on schedule and without any outstanding defect, restriction, or corrective action relating to the compressor blading

4. Hot Gas Path Inspection of October and November 2022

A 33,000-hour Hot Gas Path Inspection was carried out on unit GT12 between 16 October 2022 and 14 November 2022. At the time of that inspection the UNEW compressor blading had accumulated approximately 32,000 operating hours and approximately 33,000 Equivalent Operating Hours in service since its installation in November 2018.

The compressor blade rows 1 through 16 were inspected in place during the outage. The inspection covered the leading edges, the trailing edges, the airfoil surfaces, the visible platforms, the blade tips, and the surrounding flow path areas of all accessible rows, together with a review of the compressor flow path for deposits, corrosion marks, contact marks, abnormal rub, and loose material.

All accessible compressor blade rows were found to be in good and acceptable condition. The blading was certified good and suitable for continued operation. No compressor row was removed, no blade was replaced, no repair was carried out, and no corrective action of any kind was required on the compressor blading as a result of that inspection. The blading was returned to service in the machine in the condition in which it was found.

5. Service from November 2022 to the Present and Scheduled Major Inspection

Following the Hot Gas Path Inspection of 2022, unit GT12 was returned to commercial service with the same UNEW compressor blading installed, in the condition in which it was found at that inspection. The unit has since been dispatched continuously in normal commercial operation.

In the period from November 2022 to the date of this letter, the UNEW compressor blading has accumulated a further period of service of approximately 33,000 Equivalent Operating Hours. The cumulative service accrued on this blading since its installation in November 2018 is therefore approximately 66,000 Equivalent Operating Hours, covering two complete inspection intervals of the unit.

Throughout this second interval the blading has again performed without incident. No compressor blade supplied by UNEW, Inc. has been removed, repaired, or replaced. No failure, liberation, cracking, distortion, abnormal wear, or rub event has occurred. No forced outage, load restriction, or derating of unit GT12 has been caused by or attributed to the compressor blading at any point during this period.

Unit GT12 is scheduled for its Major Inspection in September 2026. The unit is entering that outage on its planned schedule, with no outstanding defect, no deferred corrective action, and no restriction of any kind relating to the compressor blading supplied by UNEW, Inc.

6. Present Condition

The compressor blading supplied by UNEW, Inc. and installed in November 2018 remains installed in unit GT12 and remains in commercial service at the date of this letter. The unit continues to operate normally. The period of continuous commercial service of these components therefore exceeds seven (7) years and approximately 66,000 Equivalent Operating Hours.

On the basis of the operating record of the unit, the findings of the Hot Gas Path Inspection of 2022, and the operating experience over the subsequent interval, EPEC confirms that the compressor blading supplied by UNEW, Inc. has performed satisfactorily and reliably throughout its service life to date and has met the requirements of this plant for its intended application.

7. Statement of Reference

EPEC confirms without reservation that UNEW, Inc. supplied a complete set of compressor blading, rows 1 to 16, for a Siemens SGT5-2000E / V94.2 gas turbine; that this blading was installed in a commercially dispatched utility generating unit in November 2018; that it has remained in continuous service in that unit for more than seven years; that it completed a first inspection interval of approximately 33,000 Equivalent Operating Hours and was formally inspected in 2022 and found in good condition and suitable for continued operation without replacement; that it has since completed a second interval of approximately 33,000 Equivalent Operating Hours, giving approximately 66,000 Equivalent Operating Hours of cumulative service; that the unit is entering its scheduled Major Inspection in September 2026 on programme and with no outstanding issue on these components; and that the blading has caused no failure, no forced outage, and no restriction of the unit at any time since installation.

EPEC issues this letter for the information of EVNGENCO3 and the Phú Mỹ 2.1 Power Plant and has no objection to its use in support of the qualification of UNEW, Inc. as a supplier of gas turbine components. Any technical or operational point in this letter may be verified with the undersigned at the address shown.

For any questions of concerns, please contact

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Yours faithfully,

Signature:



Ing. Gabriel Eduardo Ros

Gerente de Generación / Generation Manager

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ANNEX A

COMPRESSOR BLADING SUPPLIED BY UNEW, INC. AND INSTALLED IN UNIT GT12

Central Térmica Bicentenario, Pilar, Córdoba, Argentina | Siemens SGT5-2000E / V94.2, S/N 800784 | Installed November 2018

The following table lists the complete compressor blading supplied by UNEW, Inc. under Purchase Order EI-UNEW-PO-2017-0206 and Delivery Note DN-EI-UNEW-2018-0402, and installed in compressor rows 1 to 16 of unit GT12 in November 2018. All items listed remain installed in the unit at the date of this letter.

Item	UNEW Part No.	PB No.	Description	Serial No.
1	A2A2001101-G001	PB0000253001	Standard Compressor Blade, Row 1	AA18K3631
2	A2A2001101-G002	PB0000253002	Locking Compressor Blade, Row 1	AA18K3179
3	A2A2001102-G001	PB0000253003	Standard Compressor Blade, Row 2	AA18K7654
4	A2A2001102-G002	PB0000253004	Locking Compressor Blade, Row 2	AA18K5206
5	A2A2001103-G001	PB0000253005	Standard Compressor Blade, Row 3	AA18K7321
6	A2A2001103-G002	PB0000253006	Locking Compressor Blade, Row 3	AA18K8394
7	A2A2001104-G001	PB0000253007	Standard Compressor Blade, Row 4	AA18K3231
8	A2A2001104-G002	PB0000253008	Locking Compressor Blade, Row 4	AA18K9781
9	A2A2001105-G001	PB0000253009	Standard Compressor Blade, Row 5	AA18K7689
10	A2A2001105-G002	PB0000253010	Locking Compressor Blade, Row 5	AA18K3507
11	A2A2001106-G001	PB0000253011	Standard Compressor Blade, Row 6	AA18K7209
12	A2A2001106-G002	PB0000253012	Locking Compressor Blade, Row 6	AA18K2579
13	A2A2001107-G001	PB0000253013	Standard Compressor Blade, Row 7	AA18K1867
14	A2A2001107-G002	PB0000253014	Locking Compressor Blade, Row 7	AA18K7360
15	A2A2001108-G001	PB0000253015	Standard Compressor Blade, Row 8	AA18K3772
16	A2A2001108-G002	PB0000253016	Locking Compressor Blade, Row 8	AA18K3313
17	A2A2001109-G001	PB0000253017	Standard Compressor Blade, Row 9	AA18K3308
18	A2A2001109-G002	PB0000253018	Locking Compressor Blade, Row 9	AA18K1107
19	A2A2001110-G001	PB0000253019	Standard Compressor Blade, Row 10	AA18K8922
20	A2A2001110-G002	PB0000253020	Locking Compressor Blade, Row 10	AA18K4245
21	A2A2001111-G001	PB0000253021	Standard Compressor Blade, Row 11	AA18K6647

Item	UNEW Part No.	PB No.	Description	Serial No.
22	A2A2001111-G002	PB0000253022	Locking Compressor Blade, Row 11	AA18K7187
23	A2A2001112-G001	PB0000253023	Standard Compressor Blade, Row 12	AA18K7030
24	A2A2001112-G002	PB0000253024	Locking Compressor Blade, Row 12	AA18K7429
25	A2A2001113-G001	PB0000253025	Standard Compressor Blade, Row 13	AA18K5894
26	A2A2001113-G002	PB0000253026	Locking Compressor Blade, Row 13	AA18K9897
27	A2A2001114-G001	PB0000253027	Standard Compressor Blade, Row 14	AA18K5499
28	A2A2001114-G002	PB0000253028	Locking Compressor Blade, Row 14	AA18K2264
29	A2A2001115-G001	PB0000253029	Standard Compressor Blade, Row 15	AA18K2942
30	A2A2001115-G002	PB0000253030	Locking Compressor Blade, Row 15	AA18K9798
31	A2A2001116-G001	PB0000253031	Standard Compressor Blade, Row 16	AA18K7194
32	A2A2001116-G002	PB0000253032	Locking Compressor Blade, Row 16	AA18K6876

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