



CONSOLIDATED COMMISSION ON UTILITIES

Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671) 648-3002 | guamccu.org

GPA RESOLUTION NO. FY2023-17

RELATIVE TO THE APPROVAL PRE-DEVELOPMENT STUDY FOR LIQUEFIED NATURAL GAS UNDER THE EPCM CONTRACT

WHEREAS, Stanley Consultants was awarded the Engineering, Procurement and Construction Management (EPCM) contract in December 2022 to support the construction and commissioning of the Ukudu Power Plant and to support development and procurement of liquefied natural gas infrastructure (LNG) to supply natural gas to the new power plant; and

WHEREAS, the approved EPCM contract excluded LNG tasks to allow more time for scope evaluation and for LNG tasks to be submitted for approval; and

WHEREAS, in 2011 a preliminary feasibility study was completed by R.W. Beck on the importation of LNG to Guam and use of natural gas on GPA's generation fleet to support fuel diversification strategy in the 2008 Integration Resource Plan (IRP) for fuel security and fuel cost reduction; and

WHEREAS, the 2011 study evaluated projected fuel requirements for preliminary sizing, configuration and siting, estimated capital costs for terminal and piping infrastructure and fuel conversion of existing units, and discussed acquisition strategies and risks; and

WHEREAS, the 2012 IRP recommended a new generation resource and natural gas to meet future growth, integrate renewables, improve reliability, increase efficiency and reduce operating costs including fuel costs; and

1 **WHEREAS**, in support of the 2012 IRP, GPA held a forum in April 2014 to present
2 GPA's IRP and discuss LNG as an opportunity on Guam which included local stakeholders and
3 potential vendors for LNG infrastructure and supply; and

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5 **WHEREAS**, at the request of the PUC as part of the review of the 2012 IRP, an updated
6 LNG feasibility study was completed under the Program Management Office (RW
7 Armstrong/CHA) and filed in June 2014 in the Resource Implementation Plan; and

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9 **WHEREAS**, since then GPA has contracted the dual-fuel capable Ukudu Power Plant to
10 be commissioned in 2024, retired generation units, committed to Renewable Portfolio Standard
11 goals of 50% by 2030, and transitioned all fossil fuel generation to ultra-low sulfur diesel and
12 ultra-low sulfur fuel oil; and

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14 **WHEREAS**, fuel oil costs have soared due to global issues and continue to be extremely
15 volatile; and

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17 **WHEREAS**, Stanley Consultants, Inc. have presented a multi-phase process for LNG
18 acquisition and transition; and

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20 **WHEREAS**, Phase I is the initial pre-development work which includes for site
21 evaluation, volume requirements, supply / shipping options, and risk development. This task will
22 update prior studies to firm up the site selection options, viable technical LNG terminal options
23 and estimated project costs. It will also update supply costs estimates, initiate supplier outreach
24 and develop potential vendor listings; and

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26 **WHEREAS**, Phases II and III are for infrastructure bid development, execution, and
27 implementation that will be addressed later. Additionally, Phase IV evaluates transshipment
28 within the region supporting neighboring islands; and

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30 **WHEREAS**, the use of natural gas at the Ukudu Power Plant will reduce the fixed
31 operations and maintenance (FOM) costs by 34% and the variable operations and maintenance
32 costs by 6.25% as well as extend the interval period for maintenance schedules; and

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2 **WHEREAS**, the overall schedule for LNG development to commissioning is estimated
3 to take 63 months which includes estimate for contractor's permitting and financial close period;
4 and

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6 **WHEREAS**, the Phase I scope from Stanley Consultants is estimated at \$1,809,000 and
7 to be complete within 12 months.

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9 **NOW BE IT THEREFORE RESOLVED**, the Consolidated Commission on Utilities
10 does hereby approve the following:

- 11
12 1. The CCU authorizes the GPA General Manager to petition the Guam Public Utilities
13 Commission (PUC) for approval of the Phase I LNG Pre-Development Scope to
14 Stanley Consultants, Inc., EPCM for the new power plant, for \$1,809,000 plus 20%
15 contingency.

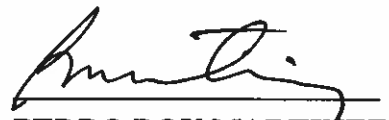
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17 **RESOLVED**, that the Chairman of the Commission certifies and the Secretary of the
18 Commission attests to the adoption of this Resolution.

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20 **DULY AND REGULARLY ADOPTED**, this 25th day of April 2023.

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22 Certified by:

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25 **JOSEPH T. DUENAS**
26 Chairperson

27 Attested by:

28 
29 **PEDRO ROY MARTINEZ**
30 Secretary

1 I, **Pedro Roy Martinez**, Secretary of the Consolidated Commission on Utilities (CCU)
2 as evidenced by my signature above do hereby certify as follows:

3 The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular
4 meeting by the members of the Guam Consolidated Commission on Utilities, duly and
5 legally held at a place properly noticed and advertised at which meeting a quorum was
6 present and the members who were present voted as follows:

7 AYES: 4

8 NAYS: Ø

9 ABSTAIN: Ø

10 ABSENT: 1

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1 **Stanley Consultants LNG Scope:**

- 2 1. Phase I: Pre-Development (12 months)
- 3 • Preliminary conceptual site selection, and LNG receiving terminal, LNG storage, and regasification facility functional design
 - 4 • Business model analysis and selection
 - 5 • Industry outreach
 - 6 • Environmental, cultural, and construction permit survey
 - 7 • Project Execution Plan and Work Breakdown Structure Development
 - 8 • Regulatory support for PUC
 - 9 • Regulatory and stakeholder outreach support
- 10 2. Phase II: LNG Infrastructure Procurement (15 months)
- 11 • Proponent outreach
 - 12 • Bidder pre-qualification process
 - 13 • Prepare draft bidding document
 - 14 • LNG infrastructure contract negotiations
 - 15 • Fuel contract and procurement for fuel supply
- 16 3. Phase III: LNG Infrastructure Implementation (24 months)
- 17 • Engineering support during construction phase
 - 18 • Project management, post-construction, and regulatory outreach support
- 19 4. Phase IV: LNG/CNG Transshipment (OPTION)
- 20 • Assess Potential LNG Demand for Bunkering and Regional Transshipment
 - 21 • Assess Potential LNG/Natural Gas Demand in Guam by Other Industrial/Commercial Users
 - 22 • Identify and Analyze On-island Transshipment and Distribution Options
 - 23 • Analyze Business Case and Estimate Viable Demand
 - 24 • Analyze and Implement Contracting/Procurement Options

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Phase	Description	Estimated Cost
I	Pre-Development	\$ 1,809,000
II	LNG Infrastructure Procurement	\$ 1,731,000
III	LNG Infrastructure Implementation	\$ 391,000
	SUBTOTAL	\$ 3,931,000
IV	<i>Option : LNG/CNG Transshipment</i>	\$ 253,000
	TOTAL	\$ 4,184,000

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