

# REQUEST FOR INFORMATION

# for the Construction of the New Marine Scientific Research and Exploration Vessel

RFI Due Date: August 31, 2020

# **Submittal Locations:**

Hard & Soft Copy
Department of Energy
Energy Resource Development Bureau-Petroleum Resources Development
Division
Energy Center, Rizal Drive corner 34<sup>th</sup> Street
Bonifacio Global City, Taguig City
Philippines 1632

**Electronic Copy:** 

prdd@doe.gov.ph

#### I. Statement of Need

This is a Request for Information (RFI), issued by the Department of Energy, Energy Resource Development Bureau-Petroleum Resources Development Division (DOE ERDB-PRDD). The purpose of this RFI is to gain the following information regarding the potential construction and delivery of one (1) unit of Marine Scientific Research and Exploration Vessel (MSREV).

- a. A measure of industry interest in constructing the (MSREV); identification of shipyards to receive the MSREV request for proposals.
- Facility requirements to construct the MSREV including capabilities and capacity.
- c. DOE ERDB-PRDD is interested in suggested contract improvements offering mutual benefit to both DOE and the potential contractor. DOE is particularly interested in receiving comment/s on performance and payment bonding requirements and contract retainage requirements.
- d. Feedback and suggested improvements regarding potential MSREV Request for Proposal (RFP).
- e. Industry comments regarding the MSREV design and concerns regarding vessel constructability and construction schedule.

DOE is under no obligation to consider or incorporate information provided in response to this RFI and may do so at its sole discretion and consistent with applicable laws.

MSREV may be funded using the Special Account General Fund (SAGF-151) or Executive Order No. 848 also known as "Authorizing the use of the SAGF 151 of the Department of Energy for purposes as may be directed by the President of the Philippines". Under this order SAGF-151 may be used to finance energy resource development and exploration programs and projects of the government and for such other purposes as may be directed by the President of the Philippines pursuant to Section 8 of P.D. No. 910.

DOE anticipates contracting for the construction of one (1) MSREV and will reserve the right to exercise options to contract additional units in the future.

#### II. Background

The Philippines' Department of Energy (Filipino: Kagawaran ng Enerhiya), abbreviated as DOE is the executive department of the Philippine Government responsible for preparing, integrating, coordinating, supervising and controlling all plans, programs, projects and activities of the Government relative to energy exploration, development, utilization, distribution and conservation. The Department of Energy was created by then President Marcos as he issued Presidential Decree No. 1206 which created the Ministry of Energy and attached the National Power Corporation and Philippine National Oil Company to this new agency. The Ministry

was abolished during the Regime of Corazon Aquino. During the Regime of President Fidel V. Ramos, that Department was created by virtue of Republic Act No. 7638 otherwise known as the Department of Energy Act of 1992.

#### III. MSREV Design Highlights:

The DOE envisions the MSREV to be a ship capable of conducting scientific studies and gathering data. It will be equipped with specialized instruments and equipment built to operate in tough environmental conditions at sea. It is a vessel capable of multi-purpose or interdisciplinary applications such as geophysical, hydrographic / oceanographic surveys, meteorological, marine biology and fishery research. This asset will enable the DOE and the Philippine Government to conduct independent research capability to explore, develop and produce additional energy resources.

#### **Proposed Functions**

The vessel shall be capable and equipped for performing the following tasks:

- 1. Oil and Gas Exploration (2D and 3D seismic, gravity and magnetic surveys)
- 2. Hydrographic and Bathymetric Survey
- 3. Oceanographic Survey
- 4. Meteorological Studies
- 5. Marine Biology and Fishery Research

#### Proposed Capabilities and Features

- ➤ The vessel should have large aft Deck for operational flexibility: three (3) to five (5) 20 ft. laboratory vans, plus adequate remaining deck space for multidisciplinary operations
- > Helicopter deck
- > At-sea replenishment capable
- > High bandwidth satellite communications for worldwide operations
- > Acoustically quiet
- Energy efficient
- > Suitable for operations in Philippine conditions
- > Day, Night and Bad weather operations

#### Proposed specifications can be seen on "Annex A"

#### IV. Procedure of Response

The end user of the ship will be the DOE. Ship builders must fill a Covering Sheet form of response as given in "Annex B" to DOE. Apart from filling details about the company, particulars regarding similar projects or agreement/s with private and national government should be discussed. The company should also provide the technical and industrial qualifications, eligibilities and work-related experiences, achievements and track records related to technical and industrial undertakings.

Additional information on the project can also be attached with the form such as but not limited to the following:

- a. State your shipyard's interest in constructing the MSREV and may provide a draft proposal for the Request for Proposal (RFP).
- b. Describe the requirements including capabilities and capacity for a shipyard facility to construct the MSREV.
- c. Provide a general estimate of the construction time.
- d. Provide a staggered payment scenario in relation to the stage of completion of the project.

Last date of acceptance of filled form is on 31 August 2020. Companies that submitted their intention and requirements for the RFI would be invited for a scheduled meeting.

#### V. Submittals

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Respondents are requested to submit the following responses to this RFI:

- a. Submitted Application/s must be in both paper and digital (USB Drive in PDF format) copies and must be in English language.
- b. Hard copy, must be in a sealed package or envelope dropped off in person or delivered to the submittal location as mentioned on the Title page or as listed below under Issuing Office and Contact.
- c. Issuing Office and Contact

#### Issuing Office:

The Energy Resource Development Bureau - Petroleum Resources Development Division (ERDB-PRDD) of the Department of Energy is the issuing office and is the sole point of contact for this Request for Information. Address all concerns or questions pertaining to this RFI to the identified contact below.

Contact Persons:

Name:

Donato D. Marcos

Position:

Undersecretary in-charge of ERDB

Name:

Atty. Cesar G. Dela Fuente III

Position:

Director of ERDB

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cesar.delafuente@doe.gov.ph/prdd@doe.gov.ph

Address:

Energy Center, Rizal Drive corner 34th Street

Bonifacio Global City, Taguig City, Philippines 1632

Annex A

# **Proposed MSREV Specifications**

ITEM	SPECIFICATION
Owner	Department of Energy
Flag	Philippines
Overall Length	at least 100 meters preferred
Breadth / Beam	~17-20 meters preferred
Max Draft	~ 5 - 7 meters
Gross Tonnage	7000 – 12000 tons
Net Tonnage	2000 - 2700 tons
Deadweight	3000 - 4000 tons
Maximum Load Speed	At least 15 Knots
Cruising Speed	At least 12.5 Knots

# Fuel

ITEM	SPECIFICATION
	40 - 100 days; Unlimited With at Sea Refuel and
Endurance	Supply
Range at Cruising Speed	At least 3000 NM
Fresh Water Production	YES
Sewage Treatment	YES
Roll Reduction Tanks	integrated ballast tank acting as anti-roll tank
Water Ballast	YES
Provision Rooms	# Freezers, # Cold Stores, # Dry Provision
	At least 12-14 crews or in accordance with
	Marine Notice 184 – Minimum Manning
Safe Manning Certificate (Minimum)	requirements

Propulsion

ITEM	SPECIFICATION
Total Propulsion	Diesel Electric
Propellers	YES
Azimuth Thruster	YES
Bow thrusters	YES
Stern thruster	YES
Generators	YES
Auxiliary generators	YES
Emergency Generators	YES
U.P.S.	YES
Bollard Pull	90 to 110 Tonnes, (70 Tonnes @ 5 knots)

# Communication

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ITEM	SPECIFICATION
COMMUNICATION SYSTEMS	
	2-3 X JHS-780D VHF
	2-3 X JHS-7 VHF GMDSS Portable
	2-4 X GP 360 VHF portable
	8 X GP 360 UHF Portable
	2-4 X GM 380 UHF Fixed
Portal VHF	2X Sailor RT2048 (one in Instrument room)
MF/HF Radio	YES
Inmarsat A Receivers & Number	N/A
Inmarsat B receivers & Number	
Inmarsat C	YES
Inmarsat M	
Very Small Aperture Terminal (VSAT)	
Receivers & Numbers	YES
Marisat Receivers & Numbers	Yes
Weather Facsimile	YES
Navtex receiver	YES
Safety	YES
Data Transfer	YES (at least 512K Bits/Second)
Emergency Radio Beacon (EPIRB)	YES
Ship / air craft Radio	YES
Radar Transporder	YES at least 2

Navigation

ITEM	SPECIFICATION
Radars	YES
Gyro Compass	YES
AutoPilot	YES
Speed Log	YES
Echo Sounder	YES
Electronic Chart Display and Information System (ECDIS)	YES
Steering System (Autopilot)	N/A
Tracking System	YES
GPS	YES
Magnetic Compass	YES
Wind Indicator	YES

Automatic Identification System (AIS)	YES
Voyage Recorder	YES

Safety

ITEM	SPECIFICATION
Safety Equipment	
Man, Overboard Boat (MOB) Boat	YES
Lifeboat	Yes (at least 70 pax capacity)
Emergency Position Indicating Radio Beacon (EPIRB)	YES
Life Raft	YES (4 X 35 persons)
Immersion/Survival Suits	YES (at least 70 units)
Life vests	150 Units
Work Vests	YES
Life Buoys	10 units
Fast rescue Craft (FRC)	N/A
Seismic Workboat	See Workboat

Firefighting

ITEM	SPECIFICATION
Firefighting Equipment	YES
Engine Room	CO 2 Total Flooding Watermist CO 2 / 5 Kg = 4pcs Powder / 50 kg = 1pc Powder / 9Kg = 19 pcs Foam / 25 Liters = 1 pc Foam / 9 Liters = 2 Pcs
Compressor Room	CO 2 / 5 KG = 1 pc Powder / 9Kg = 2Pc
Instrument Room	Water / 9 Liters = 4 pcs CO 2 / 5 Kg = 3Pcs
Gun Shack	Co 2/ 5 Kg = 3 pcs Powder / 9kg = 2 pcs
Hazchem Storage	NIL
Galley	CO 2/ Deep Fat Fryer Ext System Water / 9 liters = 2pcs - CO 2 / 5 kg = 1pc
Accommodation	CO 2 / 5 KG = 13 pcs - CO 2 / 20Kg = 2pcs Powder / 9Kg = 1Pc Powder /25 Kg = 2Pcs Water / 9 liters = 24 Pcs Powder / 6 kg = 1 pc

Tape Storage / Rigging Room	Nil
Streamer Area and Cable Repair Room	Powder / 9Kg = 19 pcs
Paint Storage	CO 2 / 5 kg = 1 pcd
Incinerator	CO 2 Total Flooding - watermist
Main Foam Pump, Aff Foam Mixture Main Fire Pump Type / Flow	YES YES
Emergency Fore Pump Type/Flow	YES
Fire Detection Monitoring System	YES
Fire Blankets	Yes 2 in Galley
Helideck Fire Pumps	1 X Desmi A/S 140 M3/H

## Accommodation

17208

ITEM	SPECIFICATION
Arrangement	
Cabin Types	35 Single Cabins 16 Double Cabins 1 of four Berth Cabins
Total	52 Cabins and 70 Berths
Conference and Training Room	1 Conference Room
Sauna and Fitness Room	4 Day Rooms and 1 Gym

# Helideck

ITEM	SPECIFICATION
Equipment and Certification	
Helicopter Deck Rating	Design dependent
Fire Fighting	YES
Non-Directional Beacon	Homing Beacon
Ship / Air Communication	YES
Motion Weather Info	YES

# Workboat

ITEM	SPECIFICATION
Туре	
Manufacture	YES
Length	7.88 m
Beam	2.87 m
Draught	1.2 m
weight	4.0 T (Max Weight Fully Loaded 5.4 T)
Engines	Inboard Diesel (180HP)

Propulsion / Water Jet	Variable Pitch Propeller
Hull #	1536
Hydraulic	Cable Lift and 2 Winches (Fore and Aft)
Bollard Pull	2.2T
Fuel	Diesel
Speed	12 knots
Passengers (Max)	3 Crew, 1 Pax

Towing Equipment

17000

ITEM	SPECIFICATION YES	
Towing Equipment		
Tow Points	10	
Streamer Winches	10 (capacity 9000m each)	
Storage Winches	3	
Wide-Tow Winches	2	
Wide-Tow Winches (Load Cells)	Yes	
Streamer Winches Sensors	No	
Vane Capacity	2 X	
Current Vane	Baro 48 Off Vessel Baro-B-3 Onboard	
	According to Spread at Sea / From +2 to -1	
Vane Rigging Type	(Currently -2)	

Seismic Compressor

ITEM	SPECIFICATION	
Compressors	YES	
Total Air Capacity	1 Scfm ~ 1.7 Nm3/h	
Nominal Spare Air Capacity	2,200 cubic feet per minute (cfm)	
Operating Air Capacity	2,200 cfm	

## ANNEX B

# COVERING SHEET FORM

Company Name	Country of Registration	Parent Company (If Applicable)
Address:	-	
Authorized Contact person/s	Telephone:	Fax:
Email Address:	Website:	
It is certified that the foregoing informula that any omission or misinterpret sufficient cause for the		ormation shall be
Authorized Repre	esentative and Signatur	e