

**Statement of Work
For
Supply and Delivery of Liquid Nitrogen to the LIGO Hanford Observatory Site**

1.0 Scope

- The Contractor will be required to supply and deliver liquid nitrogen (LN2) to the LIGO Hanford Observatory, 127124 N. Route 10 on the US DOE Hanford Reserve, approximately 12 miles outside of Richland Washington.
- The LIGO site consists of eight vertical dewars (of which six are 14,400 gallons and two being 17,260 gallons) distributed along 5 miles of private paved road with adequate truck access to each dewar.
- The annual total LN2 consumption is approximately 350,000 gallons.
- Delivery availability must be sufficient to prevent any individual dewar falling below 30% of its capacity.
- Only full truck loads will be accepted.
- Trucks should be able to unload 6000 gallons in one hour.
- LIGO will order LN2 for delivery during the site delivery window which is currently 8:00am to 12:00 noon on Tuesdays. LIGO will provide a minimum of 5 working days notice prior to delivery. Note that deliveries are currently only allowed during the Tuesday maintenance periods but exceptions may be allowed for traffic and weather delays. Also, LIGO reserves the right to change the delivery window.

1.1 Purpose

To provide Liquid Nitrogen to LIGO Hanford Observatory as needed.

1.2. Waivers or Deviations

If it is apparent that the requirements of this specification cannot be complied with, the responsible technical organization shall initiate a waiver or deviation and submit it in sufficient time to allow for proper evaluation and disposition. Submit written requests to LIGO representatives:

Primary Contact: Kyle Ryan: ryan_k@ligo-wa.caltech.edu (509-372-8129)

Alternate Contact: John Worden: worden_j@ligo-wa.caltech.edu (509-372-8136)

2.0 Requirements

- 2.1 Provide fixed price for the first three (3) years of the basic contract as follows:

Fixed price for base contract FY16 (Year 1): \$.XXX/gallon

Fixed price for base contract FY17 (Year 2): \$.XXX/gallon

Fixed price for base contract FY18 (Year 3): \$.XXX/gallon

Fixed price for Option Year 4 to be contemplated by the LIGO Project.

- 2.2 Mandatory Delivery Requirement:
Liquid Nitrogen Supply and Delivery to the LIGO Hanford Observatory Site as needed.

Deliver to the attn:
Kyle Ryan
Ligo Hanford Observatory
127124 North Route 10
Richland, WA 99354
USA

Please contact Kyle Ryan (509) 372-8129 for questions of a technical nature.
For questions of a contractual nature, please contact Steve Marroquin at
(626) 395-8431.

3.0 Period of Performance

- 3.1 Period of Performance:
October 1, 2015 through September 30, 2018
Contractor shall propose price for Three (3) years and a one (1) year option.
- 3.2 Payment Terms:
Net 30 after work have been completed.
- 3.2 F.O.B. Point:
LIGO Hanford Observatory
127124 North Route 10
Richland, WA 99354
USA
- 3.3 Billing Procedure
The Contractor will bill referencing our standard purchase order number. The Contractor is advised that invoices failing to reference any of the above will not be paid until properly identified.

4.0 General Provisions

Refer to Attachment 2 Section 1 – Commercial Items or Services Contract General Provisions.