Subject: Proposal for “Tie-in Connectivity” from the proposed upcoming LNG terminal at T. Challapalli, Uppalaguptam Mandal, East Godavari District, Andhra Pradesh to KG Basin natural gas pipeline network at Surasani Yanam GAIL gas grid in East Godavari district, Andhra Pradesh

Dear Sir,

This is with reference to “Petroleum & Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulation, 2008” (“NGPL Authorization Regulations”), as amended vide F.No. PNRGB/NGPL/REGULATION/AMEND-2014 dated 8th August 2014 which incorporates the regulation 21(1) governing the tie-in connectivity between an upstream natural gas sources to common carrier natural gas pipeline network.

We are pleased to our application under Regulation 21 (1) of “NGPL Authorization Regulations” for laying, building, operating and expanding the proposed tie-in connectivity natural gas pipeline from the proposed upcoming LNG terminal at T. Challapalli, Uppalaguptam Mandal, East Godavari District, Andhra Pradesh, to KG Basin natural gas pipeline network at Surasani Yanam (S.Yanam) GAIL gas grid in East Godavari district, Andhra Pradesh. Natural gas delivered at S.Yanam GAIL terminal would be further transported by GAIL to our affiliates like Power plants and other natural gas consumers.
The LNG terminal being set up by M/s. Hindustan LNG Ltd., will act as a new source of natural gas supply and tie-in connectivity with nearby GAIL’s K G Basin natural gas pipeline network is required for evacuation of re-gasified LNG from the proposed LNG terminal.

In accordance with the above amended “NGPL Authorization Regulations”, we would like to hear by submit our proposal for the Tie-in Connectivity” from the proposed upcoming LNG terminal at T. Challapalli, Uppalaguptam Mandal, East Godavari District, Andhra Pradesh, to K G Basin natural gas pipeline network at S.Yanam GAIL gas grid in East Godavari district, Andhra Pradesh. The detailed proposal is attached as an Annexure -1 to this letter.

We request your honorable self to kindly consider our application under the criteria of tie-in connectivity for natural gas and grant us permission to for laying, building, operating and expanding of tie-in connectivity natural gas pipeline at the earliest.

Thanking You

Yours Truly
For Hindustan LNG Limited

[Signature]
Rohit Kumar
General Manager

Enclosures:

1. Detailed proposal as per Annexure 1
2. Pipeline Route Map
3. Terms of Reference (ToR)

CC: Director, Marketing, GAIL (India) Limited
Proposal for “Tie-in Connectivity” from the proposed upcoming LNG terminal at Challapali Village, East Godavari district, Andhra Pradesh to K G Basin natural gas pipeline network at S.Yanam GAIL gas grid in East Godavari district, Andhra Pradesh

1. **Introduction**

M/s. Hindustan LNG Limited is setting up 11 MMTPA (Phase I - 5.5 MMTPA, Phase II - 5.5 MMTPA) with Floating Storage Unit (FSU) and land based Re-gasification at Challapali Village, East Godavari district, Andhra Pradesh. The import LNG terminal will be used to supply the imported LNG (after re-gasification) to the stranded gas based power plants and other neighboring consumers through the existing GAIL natural gas pipeline network.

2. **Location of LNG Import Terminal**

The LNG import terminal is located at Challapali Village, East Godavari district, Andhra Pradesh. 16°27’14.3249 "N 82°03’51.4617"E.

3. **Project Details**

The project features

1. Development of necessary facility / equipment for ship berthing and mooring, LNG unloading arms with all safety measures.
2. LNG storage in a Floating Storage Unit (FSU).
3. LNG insulated Cryogenic Pipeline for onshore facility.
4. Onshore LNG Regasification facilities.
5. Truck loading facilities for LNG.
6. Natural gas pipeline for connectivity to existing GAIL gas distribution grid for transportation of RLNG,
The imported LNG will be unloaded from the vessel into FSU. LNG is transferred from FSU to the onshore Re-gasification system. After Regasification, RLNG is transported to Gail Gas Grid for further delivery to the clients on the GAIL Pipeline Network. LNG will be also introduced in the transportation sector as an environmental friendly fuel, hence LNG truck loading terminal facilities are envisaged.

4. Gas Pipeline Infrastructure

The location of Hindustan LNG terminal is very close to the existing KG basin natural gas pipeline network which is owned and operated by GAIL (India) Ltd. The Tie-in connectivity pipeline is proposed to be connected to KG basin natural gas pipeline at S.Yanam GAIL terminal in East Godavari district, Andhra Pradesh.

5. Project Status

- Terms of Reference issued by Ministry of Environment, Forest & Climate Change.
- Various studies related to EIA, CRZ, DPR and Risk assessment are in progress.
- Various studies related to port, dredging etc., are in progress.
- Project financing is in progress.
- Shortlisting and finalization of Floating Storage Unit (FSU) is completed.

6. Demand Supply Scenario

Around 6300 MW of gas based power plants are stranded in the states of Andhra Pradesh & Telengana. The gas requirement for these power plants would be around 27 MMSCMD. Industries related to non-power sector are also stranded or underutilized due to the shortage of gas.

Our group company Konaseema Gas Power Ltd., (KGPL) with an installed capacity of 460 MW is lying idle since 2012 with depletion of gas production in KG-D6 Basin, wherein we had allotment and Gas Supply Contract with Reliance Industries Ltd. Our consumption of natural gas is 2.2 MMSCMD and in LNG equivalent terms, it is 50,000 tons per month. We also have a long term Power Purchase Agreement (PPA) for off-take of power for a
period of 12 years with both States of Telangana and Andhra Pradesh.

We had a fond hope that the AP Gas Distribution Company (APGDC) will be setting up an LNG terminal at Kakinada with active participation of GAIL and Government of Andhra Pradesh. We understand that they are not making any progress and it seems that the project has been shelved.

Gas based power plants and many other industries requiring natural gas are either stranded or underutilized for want of natural gas since more than 5 years. In order to revive the gas based power plants to its optimum capacity and other industries in KG basin, sourcing of LNG on East Coast is very much necessary. The LNG prices have softened in the recent past and the lower prices would support the affordability by various industries and we will be able to operate the gas based power plants efficiently and effectively. Hence, we have proposed tie-in connectivity natural gas pipeline from the proposed small LNG import terminal at Chellapalli Village, East Godavari district, Andhra Pradesh.

Hindustan LNG Ltd., is also in discussion with other power plants and other gas consumers to supply Re-gasified LNG. The gas transportation capacity from the LNG terminal to gas consumption point shall be contracted by the customers. It is therefore essential that tie-in connectivity with LNG terminal is established prior to commissioning of the LNG terminal which is scheduled by Dec 2018.

Also as per the natural gas demand supply assessment for proposed LNG terminal conducted by Hindustan LNG Ltd., there was a huge gap in the demand and supply of the natural gas in India. The LNG terminal by Hindustan LNG Ltd. will help in reduction of the Demand-Supply gap on natural gas in India.

7. **Proposal**

It is proposed that, in accordance with the Amendment Regulations, 2014, dated 8th August 2014, the tie-in connectivity be established with the LNG terminal. By virtue of presence of natural gas pipelines in the vicinity of LNG terminal,
underutilization of the pipeline shall increase and will also lead to a more integrated gas network.

The proposed pipeline will be only used to facilitate onward transportation of natural gas to the gas based power plants and other industries in the states of Andhra Pradesh and Telengana. Therefore it fulfills the criteria of “tie-in connectivity pipeline for natural gas” as specified under regulation 2A (i) (a) of the Petroleum & Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Amendment Regulation 2014.1. Some of our affiliates like power plants etc., have an existing gas transmission agreement with GAIL. Also, in order to revive the gas based power plants and other industries in K G basin, sourcing of LNG on East Coast is very much necessary. Hence we need to make necessary connectivity for the proposed LNG terminal at the earliest.

The expected length of the tie-in pipeline shall be approximately 1.8 to 2 kms between the proposed Hindustan LNG terminal at Challapali Village and nearby GAIL’s KG basin natural gas pipeline network at S.Yanam GAIL terminal. The maximum send out of natural gas in the tie-in pipeline shall be 10 MMSCMD.
Pipeline Route Map

Proposed pipeline length: 1.8 to 2 kms
F. No. 10-32/2017-IA-III  
Government of India  
Ministry of Environment, Forest and Climate Change  
(IA.III Section)  
Indira Paryavaran Bhawan,  
Jor Bagh Road, New Delhi - 3  

Date: 17th August, 2017  

To,  
M/s Hindustan LNG Ltd,  
6-2-913/914, 2nd Floor Progressive Towers,  
Khamirabad – 500 004, Hyderabad,  
Email: hindustanlpg@gmail.com  

Subject: Proposed LNG, LPG import facilities with Captive Jetty & Breakwaters at T. Challapalli Village, Uppalaguaptam Mandal, East Godavari District, Andhra Pradesh by M/s Hindustan LNG Ltd - Terms of Reference - reg.  

Sir,  

This has reference to your proposal No. IA/AP/MIS/64642/2017 dated 11th May, 2017, submitted to this Ministry for seeking Terms of Reference (ToR) in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986.  

2. The proposal for grant of Terms of Reference (ToR) to the project 'Proposed LNG, LPG import facilities with Captive Jetty & Breakwaters at T. Challapalli Village Uppalaguaptam Mandal, East Godavari District, Andhra Pradesh promoted by M/s Hindustan LNG Ltd was considered by the Expert Appraisal Committee (Infra-2) in its 19th meeting held on 27-29 June, 2017.  

3. The details of the project, as per the documents submitted by the project proponent, and also as informed during the above said meeting, are under:-  

(i) The proposal is for Proposed LNG & LPG import facilities with captive jetty and breakwaters for LNG capacity of 11 MMTPA (Phase I - 5.5 MMTPA, Phase II - 5.5 MMTPA) with offshore & onshore storage tanks and LPG capacity of 4 MMTPA (Phase I - 2.0 MMTPA, Phase II - 2.0 MMTPA) with offshore and onshore storage tanks at T. Challapalli, Uppalaguaptam Mandal, East Godavari District, Andhra Pradesh.  

(ii) Total area of the project is 330 Acres.  

(iii) The proposed LNG and LPG terminal is located at a distance of 27 km in SE direction from Kotipalli railway station. The Rajahmundry Airport is at 60 km in NE direction from the proposed LNG and LPG terminal. The area is well connected by the road network. The LNG terminal is about 2.5 km in N direction from Amalepuram - S. Yanam road. NH-216 is at a distance of 14-km's from the proposed site. Kakinada port is at a distance of 70-km's.  

(iv) Raw water of 22.5 KLD will be sourced from T. Challapalli Canal. LNG & LPG Floating storage and loading terminal facilities do not require water for process.  

(v) Investment/Cost of the project is Rs. 2800 Crore.
(vi) Employment potential: During Construction 300 and during Operation 200.

(vii) Benefits of the project: Based on the growing demand in the state of Andhra Pradesh over the next 10 years, the proximity of the project location to this market is an advantage with respect reduction in freight of LNG to these markets. The financial viability also shows a good Rate of return from the project.

4. The EAC, in its meeting held on 27-29 June, 2017, after detailed deliberations, recommended the project for grant of ToR as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report. As per the recommendation of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords ToR to the project "Proposed LNG, LPG import facilities with Captive Jetty & Breakwaters at T. Chalaiapalli Village Uppalaguptam Mandal, East Godavari District, Andhra Pradesh promoted by M/s Hindustan LNG Ltd for preparation of the Environment Impact Assessment (EIA) Report and Environment Management Plan (EMP) with the following specific and general conditions in addition to Standard ToR provided at Annexure -1:

(i) Importance and benefits of the project.
(ii) Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.
(iii) Recommendation of the SCZMA.
(iv) Stage – I forest clearance to be submitted.
(v) Various Dock and shipbuilding facilities with capacities for existing and proposed project.
(vi) The Project proponents would examine the possibility of generating wave Energy and present the same in the EIA report.
(vii) Study the impact of dredging on the shore line.
(viii) A detailed impact analysis of rock dredging.
(ix) Study the impact of dredging and dumping on marine ecology and draw up a management plan through the NIO or any other institute specializing in marine ecology.
(x) A detailed analysis of the physico-chemical and biotic components in the highly turbid waters round the project site (as exhibited in the Google map shown during the presentation), compare it with the physico-chemical and biotic components in the adjacent clearer (blue) waters both in terms of baseline and impact assessment and draw up a management plan.
(xi) Details of Emission, effluents, solid waste and hazardous waste generation and their management in the existing and proposed facilties.
(xii) Toxicity Factor to be carried out on treated trade effluent beside chemical analysis.
(xiii) The existing project should avail of and submit consent to operate from the State Pollution Control Board.
(xiv) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).

(xv) Wastewater management plan.

(xvi) Details of Environmental Monitoring Plan.

(xvii) To prepare a detailed biodiversity impact assessment report and management plan through the NIOS or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity. The report shall study the impact on the rivers, estuary and the sea and include the intertidal biotopes, corals and coral communities, molluscs, sea grasses, seaweeds, subtidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standard survey methods.

(xviii) Disaster Management Plan for the above terminal.

(xix) Layout plan of existing and proposed Greenbelt.

(xx) The compliance to the conditions of consent issued by the State Pollution Control Board.

(xxi) A response to any complaints that have been received by the project against the setting up of the project including the representation submitted by the Conservation Action plan.

(xxii) The details of waste water disposal into the sea, its impacts and Management plan.

(xxiii) Status of court case pending against the project.

(xxiv) Certified compliance report issued by the Regional Office of MoEF&CC, for environmental conditions stipulated in the environmental clearance issued earlier, if any.

(xxv) Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.

(xxvi) A tabular chart with index for point wise compliance of above TOR.

General Guidelines

(i) The EIA document shall be printed on both sides, as far as possible.

(ii) All documents should be properly indexed, page numbered.

(iii) Period/date of data collection should be clearly indicated.

(iv) Authenticated English translation of all material provided in Regional languages.

(v) The letter/application for EC should quote the MoEF&CC File No. and also attach a copy of the letter prescribing the ToR.

(vi) The copy of the letter received from the Ministry on the ToR prescribed for the project should be attached as an annexure to the final EIA-EMP Report.
(vii) The final EIA-EMP report submitted to the Ministry must incorporate the issues mentioned in ToR and that raised in Public Hearing. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report where the specific ToR prescribed by the Ministry and the issue raised in the Public Hearing have been incorporated. Questionnaire related to the project (posted on MoEF&CC website) with all sections duly filled in shall also be submitted at the time of applying for EC.

(viii) Grant of ToR does not mean grant of EC.

(ix) The status of accreditation of the EIA consultant with NABET/QCI shall be specifically mentioned. The consultant shall certify that his accreditation is for the sector for which this EIA is prepared.

(x) On the front page of EIA/EMP reports, the name of the consultant/consultancy firm along with their complete details including their accreditation, if any shall be indicated. The consultant while submitting the EIA/EMP report shall give an undertaking to the effect that the prescribed ToRs (ToR proposed by the project proponent and additional ToR given by the MoEF&CC) have been complied with and the data submitted is factually correct (Refer MoEF&CC Office memorandum dated 4th August, 2009).

(xi) While submitting the EIA/EMP reports, the name of the experts associated with/involved in the preparation of these reports and the laboratories through which the samples have been got analysed should be stated in the report. It shall clearly be indicated whether these laboratories are approved under the Environment (Protection) Act, 1986 and the rules made thereunder (Please refer MoEF&CC Office Memorandum dated 4th August, 2009). The project leader of the EIA study shall also be mentioned.

(xii) All the ToR points as presented before the Expert Appraisal Committee (EAC) shall be covered.

5. The above ToR should be considered for the project ‘Proposed LNG, LPG import facilities with Captive Jetty & Breakwaters at T. Challapalli Village Uppalaguptam Mandal, East Godavari District, Andhra Pradesh promoted by M/s Hindustan LNG Ltd., in all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006.

6. A detailed draft EIA/EMP report should be prepared in terms of the above additional ToR and should be submitted to the State Pollution Control Board for conducting Public Hearing. Public Hearing to be conducted for the project in accordance with the provisions of the EIA Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing should be conducted based on the ToR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the web-site.

7. The project proponent shall submit the detailed final EIA/EMP report prepared as per ToR including issues raised during public hearing to the Ministry for considering the proposal for environmental clearance within 3 years as per the MoEF&CC O.M. No.J-11013/41/2006-IA-II(I) (P) dated 08.10.2014.

8. The consultants involved in preparation of EIA/EMP report after accreditation with Quality Council of India/National Accreditation Board of Education and Training (QCI/NABET) would need to include a certificate in this regard in the EIA/EMP
reports prepared by them and data provided by other Organization(s)/Laboratories including their status of approvals etc. vide Notification of the MoEF&CC dated 19.07.2013.

9. The prescribed ToR would be valid for a period of three years for submission of the EIA/EMP Reports.

(Kushal Vashist)
Director

Copy to:
The Member Secretary, Andhra Pradesh Pollution Control Board, Paryavaran Bhavan, A-III, Industrial Estate, Sanath Nagar, Hyderabad, Andhra Pradesh. Email eawss@pcb.ap.gov.in.