

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सडक परिवहन और राजमार्ग मंत्रालय, भारत सरकार)

National Highways Authority of India

(Ministry of Road Transport and Highways) Project Implementation Unit: Puducherry.

No. 28&29, 1st Cross, Ganapathy Nagar, Arumparthapuram

Puducherry - 605 110. 11012/NH-45A/11/Vol-1/2022 /PIU-PDY/ 2358



Phone: 0413 - 2969493 E-mail: piupuducherry@nhai.org nhaipuducherry@gmail.com

09th December, 2022

Invitation of Public Comments

NHAI - PIU - Puducherry - Four laning of Puducherry (Km.29/000) to Sub: Poondiyankuppam (Km.67/000) Section of NH-45A on HAM under NHDP Phase-IV in the state of Tamil Nadu and U.T of Puducherry - Laying 8" Dia CS & MDPE 125mm Gas Pipeline across Existing NH45A (Exs. Ch. 70+716) by HDD Method across National Highways in the state of Tamil Nadu - Invitation of Public Comments -Reg.

The proposal is regarding permission sought by M/s. Adani Total Gas Limited for laying 8" Dia CS & MDPE 125mm Gas Pipeline across Existing NH45A (Exs. Ch. 70+716) by HDD Method across National Highways in the state of Tamil Nadu submitted to this office by M/s. Adani Total Gas Limited letter dated 17.10.2022.

2. M/s. Adani Total Gas Limitted has proposed to lay 8" Dia CS & MDPE 125mm Gas Pipeline with 14" dia encasing pipe for a length of 30m across the existing NH45A (km 70/716).

S. No	Description	Proposed Side	Existing Chainage in KM	Length in M
1	Across existing NH45A (New NH32)	RHS to LHS	70+716	30

- M/s. Adani Total Gas Limitted has proposed to lay the 8" Dia CS & MDPE 125mm Gas Pipeline across the existing National Highways by HDD Method duly keeping top of the pipeline at a depth of 2.5m below the ground level.
- The submitted proposal is in conformity with Ministry's latest guidelines, regarding accommodation of public and industrial utility services along and across National Highways, issued vide letter dated 22.11.2016.
- 5. M/s. Adani Total Gas Limitted has furnished an undertaking for shifting of the pipeline at their cost during future widening of the above road.
- 6. As per the guidelines issued by the Ministry vide letter No.RW/NH-33044/29/2015/ S&R(R) dated 22.11.2016, the proposal submitted by M/s. Adami Total Gas Limitted will

Head Office: G-5 & 6, Sector - 10, Dwarka, New Delhi - 110 075. Website: www.nhartorg of 2 Regional Office: Plot No.P-34, 3rd Floor, Sri Towers (SP) Industrial Estate, Guindy, Chennai - 600 032. be made available for 30 days for public comments/objections and the comments are to be furnished within 30 days from the day of closure.

In view of the above, comments of the public on the above proposal is invited and may be furnished to the below mentioned address:

The Project Director
National Highways Authority of India,
(Ministry of Road Transport and Highways)
Project Implementation Unit - Puducherry.
No. 28&29, 1st Cross, Ganapathy Nagar,
Arumparthapuram, Puducherry - 605 110.
Tel: 0413-2969493

Yours faithfully,

(S.Sakthivel)

DGM (T) & Project Director NHAI, PIU-Puducherry

Copy to:

1. Web-admin, NHAI HQ, New Delhi - For uploading in the Ministry's website

2. The NIC, New Delhi - For uploading in the Ministry's website.

3. The RO Chennai - for information.





Theme Engineering Services Pvt. Ltd. In Association with Ishita info Solutions Pvt.Ltd. No 2, Ganesh Nagar, Near Anna Nagar,

Cuddalore, Distt-Cuddalore 607001 Tamilnadu

Email: puducherryretherne@gmail.com CIN: U74210RJ2002PTC017485

Phone No: 04142-214496

Letter No.TES/Puducherry-Sattanathapuram/IE/NHAI-PKG-02/2022/503

Date: 03 Nov, 2022

To, The Project Director, National Highways Authority of India, Project Implementation Unit, Puducherry, No.28&29, 1st Cross, Ganapathy Nagar, Arumparthapuram, Puducherry - 605 110.

Sub: Consultancy service for Independent Engineer for supervision of construction of Four laning of (I) Puducherry - Poondlyankuppam section from Km 29.00 to Km 67.000 Poondiyankuppam - Sattanathapuram section from (N/08019/02002/TN) and (ii) Km 67.000 to Km 123.800 of NH 45A (New NH 32) in the State of Tamil Nadu and Union Pariyojana on Hybrid Annuity Mode. Proposal Territory of Puducherry under Bharatmala Received from M/s. Adami Total Gas Limited for laying 8" Dia CS & MDPE 125mm Gas Pipeline across Existing NH45A (Exs. Ch. 70+716) - IE Verification and Recommendation Requested - IE Comments - Reg.,

- Ref: 1) NHAI Lr.No.11012/NH-45A/08/Voi-1/2022/PIU-PDY/2049, dated: 22.10.2022.
 - The M/s. Adani Lr.No. ATGL/Cuddalore/NH45A/2022-23/09, dated: 17.10.2022.

Dear Sir,

With reference to the above subject and cited letters, the resubmitted proposal for laying of 8" Dia CS & MDPE 125mm gas pipeline across existing NH-45A road (existing chainage) at km 70+716 (RHS to LHS) by HDD method has been checked from our end and found to be in order.

In the view of above, the permission may be accorded to M/s. Adam Yotal Gas Ltd., for laying of 8" Dia CS & MDPE 125mm gas pipeline across the existing NH-45A road at the above said location.

This is for your kind information.

With best regards.

for Theme Engineering Services Pvt. Ltd.

In Association with Ishita Info Solveions Pvc.Ltd.

Ram Nagayan Singh

Team Leader

Puducherry-Sattanathapuram Project.

: Booklet as received. End

Copy to: Authorized Signatory, M/s. DBL PPHL - for Information.

Ohidembarani

NHAI-PIU, PUDUCHERRY DATE DIARY No DGM (T) & PD Mgr. (Tech) Dy.Mgr.(T) Site Eng. ACCOUNTANT LAO



भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सडक परिवहन और राजमार्ग मंत्रालय, भारत सरकार)

National Highways Authority of India

(Ministry of Road Transport and Highways)
Project Implementation Unit: Puducherry.

No. 28&29, 1st Cross, Ganapathy Nagar, Arumparthapuram

Puducherry - 605 110.

11012/NH-45A/08/Vol-1/2022/PIU-PDY/ 2049

To

The Authorized Signatory, M/s. Theme Eng. Services Pvt. Ltd., No.2, Ganesh Nagar, Near Anna Nagar, Ciddalore – 607 001.

Sub: Four-laning of Puducherry - Poondiyankuppam Section of NH-45A (New NH 322) from Km. 29/000 to Km. 67/000 (Design Chainage) under Bharatmala Pariyojana Phase-I (Residual NHDP-IV Works) on HAM in the state of Tamil Nadu and Union Territory of Puducherry. — Proposal Received from M/s. Adani Ttoal Gas Limited for Laying 8" Dia CS & MDPE 125mm Gas Pipeline across Existing NH45A (Exs. Ch. 70+716) — IE Verification and Recommendation Requested — Reg.

1. This Office Lr. No. 11012/NH-45A/08/Vol-1/2021/PIU-PDY/1913 Dt. 29.09.2022

M/s. Adani Lr. No. ATGL/Cuddalore/NH45A/2022-23/09 Dt. 17.10.2022.

Sir.

Ref:

This has reference to the letter cited 1st above, wherein, M/s. Adani Total Gas Limited was requested to resubmit the proposal by complying with the IE comments.

In this regard, M/s. Adani Total Gas Limited has resubmitted the proposal to lay 8" dia (219mm) carbon steel & MDPE 125mm gas pipeline across the road at existing Km. 70+716 (RHS to LHS) by HDD Method.

In this regard, it is requested to verify the proposal as per site condition and furnish remarks / recommendation to this office for further processing.

Encl: As above.

Yours faithfully,

20 | 10 | 20 |

(S. Sakthivel)

DGM (Tech) & Project Director

PIU-Puducherry

Phone: 0413 - 2969493

E-mail: piupuducherry@nhai.org

22nd Oct 2022

nhaipuducherry@gmail.com

Cc: The Authorised Signatory, M/s. DBL PHL – for information and necessary cooperation.

Head Office: G-5 & 6, Sector - 10, Dwarka, New Delhi - 110 075. Website: www.nhai.org Page 1 of 1 Regional Office: Plot No.P-34, 3rd Floor, Sri Towers (SP) Industrial Estate, Guindy, Chennai - 600 032.



ADANI TOTAL GAS LIMITED

6th Floor, East Block, Adani Corporate House, Shantigram, Ahmedabad.

Cuddalore (Cuddalore GA)

Sub: Permission for laying proposed 8" Ø (219 mm) Carbon Steel & MDPE 125 mm Gas Pipeline across NH-45A (Chennai - Nagapattinam Highway) to develop City Gas Distribution network in Cuddalore and its surrounding area.

- Across NH45A at NH.CH: 70+716 Km (Right Side to Left Side)

To
The Deputy General Manager (Tech) & Project Director,
National Highway Authority of India,
Project Implementation Unit,
Puducherry.



Shri. Rajesh Prabhu
Senior Vice President (Projects)
ADANI TOTAL GAS LIMITED
2nd Floor, Vasanth & Co. Building,
Manjakuppam, Cuddalore, Tamil Nadu. 607001.



Gas

Ref.: ATGL/Cuddalore/ NH45A/2022-2023/09

NHAI-PIU	PUDUCHERRY	
DATE	1 7 OCT 2027	
DIARY No	10558	
DGM (T) & PD		
Mgr. (Tech)		North
Dy.Mgr.(T)		1
Site Eng.		
ACCOUNTANT		
LAO	Date: 17/	10/2022

To

The Deputy General Manager (Tech) & Project Director. National Highway Authority of India, Project Implementation Unit, Puducherry.

Permission for laying proposed 8" Ø (219 mm) Carbon Steel & MDPE 125 mm Gas Pipeline across NH-45A (Chennai - Nagapattinam Highway) to develop City Gas Distribution network in Cuddalore and its surrounding area.

- Across NH45A at NH.CH: 70+716 Km (Right Side to Left Side)
- Ref: 1. 11012/NH-45A/08/Vol-1/2021/PIU-PDY/1913 Dt. 29.09.2022
 - TES/Puducherry-Sattanathapuram/IE/NHAI-PKG-02/2022/393 Dt.17.09.2022
 - 11012/NH-45A/08/Vol-1/2022/PIU-PDY/1752 Dt. 08.09.2022
 - ATGL/Cuddalore/ NH45A/2022-2023/07 Dt. 25.08.2022

Dear Sir.

With reference to the latest letter from your good office (Ref O1), hereby re-submitting the proposal by attending the comments for proceeding further.

Proposed 8" Ø (219 mm) Carbon Steel & MDPE 125 mm Gas Pipeline will be laid underground across NH-45A (Chennai - Nagapattinam Highway) which is falling under your jurisdiction. The pipeline route map is attached this shows the exact site of the 8" 0 (219 mm) Carbon Steel & MDPE 125 mm Gas Pipeline.

DETAILS OF ACROSS:

SR. NO.	DESCRIPTION	LENGTH (m)	LINE DIA
1.	Road crossing in NH45A at NH.CH: 70+716 Km near Solara industries Kudikadu. (RHS to LHS)	30	8" Ø (219 mm) Carrier pipe - Carbon Steel, MDPE 125 mm & 14" Ø Casing pipe.
	Total	30	

The Proposed Steel & MDPE pipeline for total length - 30 Mtr. along NH45A will be laid by HDD method across the road or as per directives across NH-45A (Chennai - Nagapattinam) or as per instructions of MoRTH/NHAI. We assure to restore the job-site land surface to its original condition. The details showing the route of the proposed pipeline shown in the map is attached

Adam grewith for your kind perusal. Tel +91 79 2754 1988 Adani Corporate House Shantigram, S G Highway Ahmedabad 3B2 421 Gujarat, India CIN: L40100GJ2005PLC046553

Fax +91 79 2754 2988 customercare.gas@adani.com www.adanigas.com



CUDDALOR

AGTL agree to pay fees/charges as applicable at the time of permission as per Government's guidelines. Considering the above, ATGL request you to grant us the permission to lay the said pipeline along and across NH-45A, as stated herein above.

Note: HDD can't be implemented all along the road in CGD network due to non-feasibility of tapping off in future to supply to customers.

For speedy communication between your good office and ourselves you may contact us by our email ID which is Stalin.G@adani.com, Harisudhan.T@adani.com and svsushanth.methre@adani.com.

As this is time bound project contributing to national prosperity and making the pollution free environment, your most expeditious actions are requested to grant the permission.

Yours Faithfully

For ADAN TOTAL GAS LIMITED

Shri. Rajesh Prabhu

CUSTO

Senior Vice President (Projects)

Enclosures: -

- Certificate
- 2) Proposed Route Map
- 3) Typical Trench Cross sectional diagram
- 4) Trenchless HDD Laying Technique for Road Crossing
- 5) Construction Methodology for laying pipeline along the road
- 6) Basic Information in HDD Methodology
- 7) Underground pipeline laying procedure
- 8) Indemnity Agreement
- NH Undertaking
- 10) G.O. from Tamil Nadu industries Department vide dated 27-May-2020
- 11) PNGRB Authorization vide dated 28-Sep-2018
- 12) Power of Attorney

CHECK- LIST

Guidelines for Project Directors for processing the proposal for laying of Gas pipeline in the land along National Highways vested with NHAI/PWD/BRO.

Ministry Circular No-RW/NH 330044/29/2015/S&R Dated 22/11/2016

General Information

Sr. No.	Item	Information /Status	Remarks
1	General Information	Laying of 8" Ø (219 mm) Carbon Steel, MDPE 125 mm Gas Pipeline & 14 "casing pipe.	
1.1	Name and Address of the Applicant	Adani Total Gas Limited Registered Office: Adani Total Gas Limited, Near Adani House, Mithakhali six	
1.2	National Highway Number	road, Navrangpura, Ahmedabad, Gujarat. Pincode: 380 009. NH-45A (Chennai - Nagapattinam Highway)	
1.3	State	Tamil Nadu	
1.4	Location	Cuddalore	-
1.5	(Chainage in KM)	Across: NH45A at NH.CH: 70+716 KM (Right Side to Left Side)	
1.7	Width in Meters		
	Left side from center line towards increasing chainage/Km direction	Refer the enclosed diagram	
	 Right side from center line towards increasing chainage/Km 	Refer the enclosed diagram	
1.8	Proposal to lay the Natural Gas Pipeline		
	a. Left side from center line towards increasing chainage/Km direction	Across: NH45A at NH.CH: 70+716 KM (Right Side to Left Side)	
	 Right side from center line towards increasing chainage/Km direction 	Across: NH45A at NH.CH: 70+716 KM (Right Side to Left Side)	

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Sr. No.	Item	Information /Status	Remark
1.9	Proposal to acquire land		
	a. Left side from the center line	NA	
	b. Right side from the center line	NA	1
1.10	Whether proposal is in the same side where land is not be acquired.	Yes	
	If not, then where to lay the pipeline		1
1,11	Details of already laid service if any along the proposed route.	No Utilities along the proposed route	
1,12	Number of lanes (2/4 / 6/8 lanes) existing	2 Lanes	
1.13	Proposed Number of (2 lane with paved shoulders/4/6/8 lanes)	Across: NH45A at NH.CH: 70+716 KM (Right Side to Left Side)	Road widening proposed by NHAI
1.14	Service Road existing or not	No	
	if yes then which line		
	(a) Left side from center line		
	(b) Right side from center line		
1.15	Proposed Service Road	No	
	(a) Left side from center line		
	(b) Right side from center line		
1.16	Whether proposal to lay Natural Gas pipeline is after the service road or between the service road and main carriageway	NA	
1.17	Whether carrying of sewage / Gas pipelines has been proposed on Highway bridges. If yes, then mention the methodology proposed for the same.	No	
1.18	Whether carrying of sewage / Gas pipelines has been proposed on the parapet/any part of the bridges. If yes, then mention the methodology proposed for the same.	No	



Sr. No.	Item	Information /Status	Remark
1.19	If crossings of the road involved If yes, it shall be either encased in pipes or through structure or conduits specially built for that purpose at the expenses of the agency owning the line		
	(a) Whether existing drainage structures are allowed to carry sewage/gas pipeline.	Not to be allowed	
	(b) Is it on a line normal to NH	Yes	
	(c) What is the distance of crossing the sewage/gas pipelines from the existing structures? Crossing shall not be too near the existing structures on the National Highway, the minimum distance being 15 meters.	Yes	
	(d) The casing pipe (or conduit pipe in the case of electric cable) carrying the utility line shall be of steel, cast iron, or reinforced cement concrete and have adequate strength and be large enough to permit ready withdrawal of the carrier pipe / cable. Mention type of casing	Steel pipe	
	(e) Ends of the casing / conduit pipe shall be sealed from the outside, so that it does not act as a drainage path.	Yes Sealed	
	(f) The casing / conduit pipe shall be sealed from the outside, so that it does not act as a drainage path.	Yes Sealed	
	(g) The top of the casing / conduit pipe should be at least 1.2 meter below the surface of the road subject to being at least 0.3 meter below the drain inverts. Mention the proposed details	Refer enclosed diagram	¥



Sr. No.	Item	Information /Status	Remark
	(h) Mention the methodology proposed for crossing of road for the proposed Sewage/Gas pipeline. Crossing shall be by boring method (HDD) (Trenchless Technology), especially where the existing road pavement is of cement concrete or dense bituminous concrete type.	Boring method (HDD) (Trenchless Technology)	
	(j) The casing / conduit pipe shall be installed with an even bearing throughout its length and in such a manner as to prevent the formation of a Gas way along it.	Yes	
2	Document / Drawings enclosed with the proposal	Yes Enclosed	
2.1	Cross section showing the size of trench for open trenching method (Is its normal size of 1.2-meter-deep X 0.6 meter wide) i) Should not be greater than 60 cm wider than the outer diameter of the pipe (ii) Located as close to the extreme edge of the right-of-way as possible. (iii) Shall not be permitted to run along the National Highways when the road formation is situated in double cutting. Nor shall these be laid over the existing culverts and bridges. (iv) These should be so laid that their top is at least 0.6 meter below the ground level so as not to obstruct drainage of the road land.	NA	
2.2	Cross section showing the size of pit as location of cable for HDD method	HDD Cross section Enclosed	
		STAL GAS	

Sr. No.	Item	Information /Status	Remarks
2.3	Strip plan / Route plan showing the pipe Chainage, width of ROW, distance of proposed cable from the edge of ROW, important milestone, intersections, cross drainage works etc.	Enclosed herewith	
2.4	Methodology for laying of Natural Gas pipeline	Enclosed herewith	
2.4.1	Open trenching method. (May be allowed in utility corridor only where pavement is neither cement concrete nor dense bituminous concrete type. If yes, Methodology of refilling of trench	NA	
	(a) The trench width should be at least 30 cm, but not more than 60 cm wider than the outer diameter of the pipe.		
	(b) For filling of the trench, Bedding shall be to a depth of not less than 30 cm. It shall consist of granular material, free of lumps, clods and cobbles and graded to yield a firm surface without sudden change in the bearing value. Unsuitable soil and rock edged should be excavated and replaced by selected material.		
	(c) The backfill shall be completed in two stages (i) side – fill to the level of the top of the pipe and (ii) overfill to the bottom of the road crust.		
	(d) The side fill shall consist of granular material laid in 15 cm layers each consolidated by mechanical tampering and control addition of moisture to 95% of the Proctor's Density. Overfill shall be compacted to the same density as the material that had been removed. Consolidation by saturation or ponding will not be permitted.		
	(e) The road crust shall be built to the same strength as the existing crust on either side of the trench. Care shall be taken to avoid the formation of a dip at the trench.		

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Sr. No.	Item	Information /Status	Remark
	(f) The excavation shall be protected by flagman, signs and barricades and red lights during night hours.		
	(g) If required, a diversion shall be constructed at the expense of agency owning the utility line.		
2.4.2	Horizontal Directional Drilling (HDD) Method	Enclosed herewith for Road Crossing	
2.4.3	Methodology for Laying of Natural Gas pipeline through CD works and method of laying. In cases where the carrying of gas pipeline on the bridge becomes inescapable	NA	
3	Draft License Agreement signed by two witnesses	Enclosed herewith	
3.1	The License fee estimate as per ministry's guidelines issued vide circular no.RW/NH 330044/29/2015/S&R Dated 22/11/2016	Will be provided at the time of final grant	
4	Whether Performance Bank Guarantee as per Ministry guidelines issued vide circular no.RW/NH 330044/29/2015/S&R Dated 22/11/2016	Will be provided at the time of final grant	
4.1	Confirmation of BG has been obtained as per MoRTH/NHAI guidelines	Will be provided at the time of final grant	
5	Affidavit / Undertaking from the Applicant for	-	
5.1	Undertaking for not to damage any other utility, if damaged then to pay the losses either to NHAI or to the concerned agency	Yes, Enclosed herewith	
5.2	Undertaking for Renewal of Bank Guarantee as and when asked by MoRTH/NHAI	Yes, Enclosed herewith	
5.3	Undertaking for confirming all standard condition of MoRTH/NHAI's Guidelines	Yes, Enclosed herewith	
5.4	Undertaking for indemnity against all damages and claims clause (xxiv)	Yes, Enclosed herewith	
5.5	Undertaking for management of Traffic movement during laying of utility line without hampering the traffic	Yes, Enclosed herewith	

Sr. No.	Item	Information /Status	Remarks
5.6	Undertaking that If any claim is raised by the Concessionaire, then the same has to be paid by the applicant	Yes, Enclosed herewith	
5.7	Undertaking that prior approval of the NHAI shall be obtained before undertaking any work of installation, shifting of repair or alterations to the underground utilities located in the National Highway right of ways.	Yes, Enclosed herewith	
5.8	Undertaking that expenditure, if any, incurred by NHAI for repairing any damage caused to the National Highway by the laying, maintenance or shifting of the Oil & Gas supply Pipeline will be borne by the agency owning the line.	Yes, Enclosed herewith	
5.9	Undertaking that text of the license deed is as per verbatim of format issued by MoRTH vide circular no, RW/NH 330044/29/2015/S&R Dated 22/11/2016	Yes, Enclosed herewith	
5,10	Undertaking that the applicant has obtained various safety clearance from the respective authorities such as Directorate of Electricity, Chief Controller of Explosives, Petroleum and Explosive Safety Organization, Oil Industry Safety Directorate, State/Central pollution control board and any other statutory clearances as applicable, before applying to Highway Administration	Yes, Enclosed herewith	
5,11	If the MoRTH/NHAI considers it necessary in future to move the utility line for any work of improvement or repairs to the road, it will be carried out as desired by the NHAI at the cost of the agency owning the utility line within a reasonable time (not exceeding 60 days) of the intimation given.	Yes, Enclosed herewith	
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	5	21 63	

Page **7** of **10**

Sr. No.	Item	Information /Status	Remarks
5.12	Certificate from the applicant in the following format (i) Laying of Gas supply Pipeline will not have any deleterious effects on any of the bridge components and roadway safety for traffic. (ii) We do undertake that I/we will relocate service road / approach road / utilities at my/our own cost notwithstanding the permission granted within such time as will be stipulated by NHAI for future six laning or any other development.	Yes, Enclosed herewith	
6	Who will sign the agreement on behalf of Oil & Gas Supply Pipeline agency? Power of attorney to sign the agreement is available or not	Shri. Rajesh Prabhu Senior Vice President – Projects Adani Total Gas Limited Copy of Power of Attorney enclosed	
7	The Project Director shall submit the following certificates		
7.1	Certificate that the proposal is confirming to all standard condition issued vide MoRTH circular no. RW/NH 330044/29/2015/S&R Dated 22/11/2016	Enclosed herewith	
7.2	Certificate from PD in the following format		T
	(i) "It is certified that any other location of the Gas Supply Pipeline would be extremely difficult and unreasonable costly and the installation of Pipeline within ROW will not adversely affect the design, stability & traffic safety of the highway nor the likely future improvement such as widening of the carriageway, easing of curve etc.".	Enclosed herewith	
	U#		

Sr. No.	Item	Information /Status	Remarks
	 (ii) for 6 - laning, (a) Where feasibility is available "I do certify that there will be no hindrances to proposed four -lanning based on the feasibility report considering proposed structures at the said location". (b) In case feasibility report is not available "I do certify that sufficient ROW is available at site for accommodating proposed 6 laning". 	Enclosed herewith	
8	If NH section proposed to be taken up by NHAI on BOT basis – a clause is to be inserted in the agreement. "The permitted Highway on which Licensee has been granted the right of lay pipeline/ cable / duct has also been granted as a to be inserted in the agreement. The permitted Highway on which licensee has been granted the right to lay pipeline/cable/duct has also been granted as a right of way concession agreement for up gradation of section from Km to Km of NH No on build, operate and Transfer basis and therefore the licensee shall honor the same.	NA	
9	Who will supervise the work of laying of Natural Gas Pipeline a) On Behalf of the applicant	Senior Vice President	
	b) On behalf of MoRTH/NHAI	Adani Total Gas Limited, Cuddalore NHAI, PIU, Puducherry	
10	Who will ensure that the defects in road portion after laying of Natural Gas Pipeline are corrected and if not corrected than what action will be taken?		
	a) On Behalf of the applicant	Senior Vice President Adani Total Gas Limited, Cuddalore	
	b) On behalf of MoRTH/NHAI	NHAI, PIU, Puducherry	



Sr.No.	Item	Information / Status	Remarks
11	Who will pay the claims for damages done / disruption in working of Concessionaire if asked by the Concessionaire?	ADANI TOTAL GAS LIMITED	-
12	A certificate from PD that he will enter the proposed permission in the register of records of the permissions in the prescribed proforma (copy enclosed).	Yes, enclosed herewith	
13	If any previous approval is accorded for laying of pipeline/cable, then photocopy of register of records of permissions accorded as maintained by PD then copy be enclosed		

For Adani Total Gas Limited

Shri. Rajesh Brabhu

Senior Vice President (Projects)

[Signature of Concerned Field Authority of NHAI/PWD/BRO]

30 m ADANI GAS LIMITED No.13, Nethaji Road, Manjakuppam, Cuddalore. 607001 Proposed ATGL Gas pipeline at NH45A Road crossing @ NH. CH: 70+716 KM Proposed carbon steel P/L across the RoW of NH 45A @ NH. CH: 70+716 KM KM 70/716 ATGL LCNG STATION B CH.70 716KN PROPOSED CARBON STEEL GAS P.R. . Proposed Layout plan as per DPR of NH 45A TO CHIDAMBARAM KM.70/800 adani TITLE 1. ALL DIMENSIONS ARE IN METER
2.QUALY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
100 FOUT SCALE. THE DRAWING.
100 FOUT SCALE.
4. CASKIG PIFE WILL BE PROVIDED AT HOLD DRIVERING.
5. PIPELINE MATERIAL IS API ST. X42 SUPE COATED. NH-45A (Chennal-Nagapattinam) MEDIAN KW 70/400 NOTES: AUTHORIZED SIGNATORY FOR ADMIT TOM SIGNETIMITED CUBDALORE M. 70/200 IN 뫒 Proposed Gas P/L - Kerb Shyness FROM CUDDALORE CM.70000 Median Main Carriage way Space for services nierd Vabequerin 25.7 1 m Space for Services Proposed RoW Paved Shoulder Footpath/ Drain 19bluoda bove 9 m 8.5 A sus cerupite way azonyd8 dreM m 8.0 neibald m d. EGENDS 01

SIPCOT ADANI GAS LIMITED No.13, Nethaji Road, Manjakuppam, Cuddulore, 607001 Typical HDD crossing at the RoW of NH 45A @ NH. CH: 70+716 KM ROW Road crossing @ NH. CH: 70+716 KM Typical HDD crossing at NH45A 5 INCH DIA STEEL CARRIER PIPE 14 INCH DIA CASING PIPE DRAIN 11841 MUNICIPAL TOO 2.61 RECEIVED SHOPPING Proposed Layout plan as per DPR of NH 45A adani TITLE CARRIAGE VIVY 4, CASING PIPE WILL BE PROVIDED AT ROAD CROSSING 3. PIPELINE MATERIAL IS API SL X42 3 LPE COATED Z DNLY WRITTEN DIMENSIONS SHALL RE FOLLOWED. DO NOT SCALE THE DRAWING. A DRAWING NOT TO SCALE 30 M 27 M THE RESERVE AND NOTES: AUTHORIZED SEGNATORY FOR ADANI YOU GAS LIMITED CUDDALORE AL GA CARRACTOR - Proposed Gas P/L Kerb Shyness DRAIN Main Carriage way Space for services E SPACE FOR BORNZE Proposed RoW Paved Shoulder Footpath/ Drain MOH EGENDS TONE 05

CERTIFICATE

- This proposal when implemented will not affect the design, stability, and traffic safety of highway.
- This proposal if implemented now will not affect any likely further improvement to the geometric.
- This proposal is in accordance with the specification laid down by the Ministry of surface Transport vide Lr. No. RW/NH-33041/17/2000-SNR/ dated 29.09.2000 without making any inconvenience for the traffic through the road.
- Laying of the Gas pipeline will not have any deleterious effects on any of the bridge components and roadway safety for traffic.
- We do undertake we will relocate our utilities at our own cost notwithstanding the permission granted within such time as will be stipulated by NHAI for future six laning or any other development.

Shri, Rajesh Prabhu

Senior Vice President - Projects

Adani Total Gas Limited



CONSTRUCTION METHODOLOGY FOR LAYING ALONG THE ROAD

Laying utility Services Gas Pipeline Along the NH Road

The Utility ducts are not provided. Therefore, the proposed Pipeline will be laid at suitable location preferably as close to the extreme edge of ROW.

The Trench of size is approx. 0.5 m wide and 1.2 m deep will be made by Open-Cut method for laying the Pipeline parallel to road at the extreme edge of the road. The size of Trench will be done as nearly vertical as possible. Then the Pipeline will be laid. The backfilling of the trench will be done as under:

- i) Side fill to the level of the top of the pipe
- Overfill to the bottom of the road crust.
- The overfilling will be compacted to the same density as the Material that had been removed.

The utility services Gas Pipeline will be laid beyond the toe line of the embankment and drains as close to the extreme edge of the ROW as possible far from the center of the road.

It will be ensured no time there is interface with the drainage of the road land and maintenance of the National Highways. Towards this, the top of the Gas Pipeline will be laid at least 0.4 mtr. below ground level.

The gas pipeline will not be laid over existing culverts and bridges. Since there is no provision of duct, the gas pipeline will be laid parallel the road by open cut method on the extreme edge of the road.

It will be ensured that maintenance of the utility services shall not interfere with the safe and smooth flow of traffic.

SITE CLEARANCE & SURVEY

Pipeline corridor is to be cleared for bush, shrubs if any on either side of the road. Exact reserve width of the particular road is to be marked on the site which may vary depends on the type of road.

PIPELINE MARKER SIGN & BOUNDARY FENCE

The boundary fence and the pipeline marker as per the standard specification shall be installed at distance of approx. 500 mtr.

Shri. Rajesh Prabhu Senior Vice President (Projects) Adani Total Gas Limited



Basic Information on

Horizontal Directional Drilling Methodology



Contents

SN	Description	
1	Scope	
2	Reference	
3	HDD Site Preparation	
4	HDD Operation	
5	Hydro-Static Test	
6	Reinstatement of Works	
7	Acceptance / AS-Built Records	



1.0 Scope:

This procedure covers the Basic Information for execution of HDD works, for crossing the NH-45A.

Carrier Pipe Dia.: 8" Ø (219 mm) Carbon Steel and 125 mm dia. MDPE Gas Pipeline along NH-45A. Pipeline with minimum TOP Cover at any position of the Profile 1.2 mtr.

2.0 Document Reference:

Documents shall be followed as per Adani Gas Limited Project Procedures.

3.0 HDD Site Preparation:

- 1. Approach to Site
- 2. Preparation of Entry & Exit pit
- 3. Bentonite Collection Pit (if Applicable)
- 4. HDD Equipment Deployment

4.0 HDD operation:

- 4.1 The drill site has been surveyed and drill profile drawing shall be submitted for approval. This drawing provides the profile of the drill hole. Upon approval of this drawing and completion of the pipe string preparation work including successful hydro testing of the pipe strings the entrance and exit stakes shall be fixed at the design entry and the exit points.
- 4.2 The drill profile drawing as establishes the Entrance and Exit angles as well as the radius of the curvature. The tangent lengths and the points are also shown. As may be seen from the stress calculation finished the maximum combined stress is obtained while the hydro test is in progress for the pipeline, which is well within the maximum allowable stress as shown therein.
- 4.3 The drilling rig shall be mobilized together with the auxiliary equipment by the time the pipe string have been completed and tested. The drill unit shall then be placed over the entry point of the pipeline in a position so that the drill may enter exactly at the correct location. The drill unit is then elevated at the rear in order to ensure that the angle at the entry confirm to the angle specified in the drill profile drawing. The rig is then anchored in position and is ready to commence the drilling of the pilot bore.
- 4.4 The drilling operation then begins using the drill bit, the steering tool, and the high-pressure injection of bentonite slurry. Drilling is carried out at intervals of about 20 ft. (6 mtr. approx equivalent to one length of drill pipe a new length of drill pipe being added at the end of each interval)

- 4.5 Guidance to the drill head is achieved by using an electronic navigation system, where the sensing unit is fixed to the rear end of the steering tool. This sensing unit transmitted the location of the drill head back to the operator at the control panel of the rig. The operator is thus able to always monitor the coordinates of the drill head and is able to verify the accuracy of the actual drill profile with respect to the designed drill profile by continual comparison of the coordinates. If he detects a substantial deviation of any point the operator will either correct the drilling profile or pull back a certain length and re-drill to the correct profile. The operator also has additional information from the magnetometer and the accelerator readings.
- 4.6 Once the drill bit exits end of the drill hole, the drill bit, steering tool etc are all detached, and reamer is attached to the drill string. The reamer is then pulled back by the drill rig and drill pipes are attached one after the other behind the reamer from the exit side. At the same time drill pipe shall also been withdrawn from the drill hole entry end. During the reaming or hole opening process bentonite drilling mud (if require) is pumped under the high pressure from the rig side through the drill pipe. Drill pipe being released at the entry side are transported in lots by truck to the exit side in order to bed from there during the reaming process. Once the reamer exits at the entry end, a second reamer is to be attached at the exit end and the reaming process shall be repeated.
- 4.7 Prior to the reaming process and after completion of hydrostatic test of pipe string (in a single length) a pull head shall be welded on to the end of the pipe facing other end.
- 4.8 Upon exit of the first reamer at entry end the next reamer shall be introduced from the exit end and the process is repeated (i.e., the forth reaming).
- 4.9 When the reaming of the hole has been completed, a swab with high pressure drilling mud shall be pulled through the hole. After this the hole would be ready for the pipe to be pulled in. Once driller is satisfied that the hole is cleaned up and ready to receive the pipe, the pull head is connected to the drill string through a swivel. The swivel prevents the pipe from rotating during the pull back.
- 4.10 The pipe before this stage been already placed on rollers on the ground and held by a crane or backhoe at the rear end, to minimize the friction and to ensure its smooth entry down the drilled hole. The pipe string is then pulled back from the exit end and towards the entrance end by the drill jig. The pulling process is continual with short intervals necessary for the removal of each drill pipe. Once the pull back operation is completed and one end of the pipe has emerged at the entrance point, the entire pull back operation is terminated, and the drill jig is removed.
- 4.11 Immediately after the pull back operation cathodic protection shall be installed, monitored, and controlled to protect the string from corrosion.

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- 4.12 During the different execution phases of the HDD, Various drilling operation record shall be maintained as per the following:
 - Quantity of mud used.
 - During drilling operations (per drill pipe element)
 - The maximum force apply (push/pull/torque)
 - · Time duration for assembling two elements.
 - The drilling head position in X-Y-Z co-ordinates.
 - Deviation compared to require position.
 - The proposed corrective measures
 - During drill pipe pull back (per drill pipe element)
 - · Pull back duration per element.
 - Maximum pulling force per element.
 - An alignment sheet with length profile of the pipeline (scale 1/500) showing the location of each weld joint and their X-Y-Z coordinates.

5.0 Hydro-static Test:

Hydro-static Test shall be carried out for the Pipeline section, Test Procedure shall be approved by PMC/Client.

6.0 Reinstatement of the working site and access road:

The ground occupied during the work shall be reinstated to its original condition as quickly as possible after the completion of the works.

Access to property, fences, ditches, retaining walls, irrigation systems and other structures shall be reinstated in compliance with agreements drawn up at the time of initial survey. Land register marks moved for the work shall be replaced by a surveyor, where necessary devices to prevent erosion of the backfill materials shall be installed when reinstating embankments, and slopes.

Re-instatements of footpaths, road surfaces, banks, shoulder, etc shall be performed with the agreement of authorities concerned.

7.0 Acceptance /As Built Records:

As work advances, the position of the pipe shall be surveyed and plotted on the drawings.

"As Built" Documentation containing all documents (drawings, design calculation, welding log etc) which enable location and description of the pipe shall be compiled on completion of the work.

"As Built" documents shall maximize the use of CD, computed database.

All equipment shall be duly traced with reference to initial supplier identification reference (IC) – weld logbook – certificates etc.

UNDER GROUND PIPE LAYING PROCEDURE



A. METHODOLOGY FOR HORIZONTAL DIRECTIONAL DRILLING (HDD)

HDD installation involves four main steps:

- 1) pre-site planning;
- drilling a pilot hole;
- 3) expanding the pilot hole by reaming; and
- 4) Pull back of pre-fabricated pipe.

1. Pre-Site Planning

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- A determination is made as to whether an HDD is technically and geo-technically feasible by studying existing geological data and conducting field investigations to assess the subsurface conditions and characteristics likely to be encountered during the drill.
- If an HDD is determined to be feasible, a drill path is designed to meet the requirements of the crossing and appropriate drill entry and exit locations are selected.
- An allowance is made in the design of the drill path for any potential changes in the obstacle (i.e., stream migration or cutoff development) to be drilled under and the drill entry and exit points are refined.

2. Drilling the Pilot Hole

- An HDD drill rig and supporting equipment are set-up at the drill entry location
- Determined during the pre-site planning phase.
- A pilot hole is drilled along the predetermined drill path.
- Periodic readings from a probe situated close to the drill bit are used to determine the horizontal and vertical coordinates along the pilot hole in relation to the initial entry point
- The pilot hole path may also be tracked using a surface monitoring system that determines the down hole probe location by taking measurements from a surface point.
- Drilling fluid is injected under pressure ahead of the drill bit to provide hydraulic
- power to the down hole mud motor (if used), transport drill cuttings to the surface, clean build-up on the drill bit, cool the drill bit, reduce the friction between the drill and bore wall, and stabilize the bore hole.

3. Reaming of the Pilot Hole:

- The down hole assembly is removed from the drill string upon breaking the ground surface at the exit location and is replaced with a back reamer-
- The drill string is pulled back through the bore hole and the back reamer enlarges the diameter of the drill hole;

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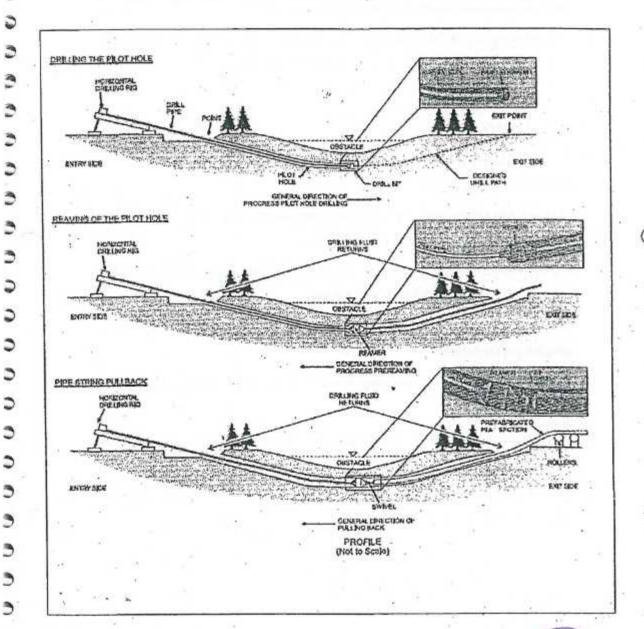
- The reamer may be pulled from the pipe side of the HDD crossing if additional passes with the reamer are required to achieve the desired bore hole diameter; and
- The reaming stage may not be necessary during HDDs for small diameter pipelines where the bore hole
 created by the pilot hole drill is of adequate size to pull back the pipe string

4. Pipe String Pull back

- Pipe is welded into a pipe string or drag section, that is slightly longer than the length of the drill, on the exit side of the bore hole.
- The pipe is typically coated with a corrosion and abrasion resistant covering, and is commonly
 hydrostatically pretested to ensure pipeline integrity.
- The pipe string is pulled over rollers into the exit hole and the pullback continues until the entire pipe string has been pulled into the bore hole.
- The external coating of the pipe string visible at the entry point is inspected for damage upon completion of the pull back.
- An internal inspection of the pipe string is performed to identify any damage done to the pipeline during the pull back.
- Upon successful pull back of the pipe string, the drilling equipment is dismantled and demobilized.
- The pipe string is connected to the conventionally laid pipeline and work areas are reclaimed with the rest of the pipeline right-of-way.



Drilling of the pilot hole and pipe string pull back are illustrated bellow figure





B METHODOLOGY FOR OPEN CUT / OPEN TRENCHING

- Before starting trenching, center line of the trench to be checked with reference to the centerline
 of Route.
- CONTRACTOR will excavate and maintain the pipeline trench on staked centerline as per alignment sheets taking into account the horizontal curves of the pipeline.
- Trenchers/JCB / Manual will be used for digging pipeline trench on cleared and graded Route for average 600MM wide..
- Suitable crossing will be provided and maintained over the Route wherever necessary to permit general public to cross or move stock or equipment from side of the trench or another.
- In steep slopes wherever here is danger of landslides, the pipeline trench shall be maintained open only for the time strictly necessary.
- For cased crossings, the pipeline will be taken through the casing pipe, the top of which
 will be at least 1.2 meters below the road top as specified or as per the requirements of the
 authorities, whichever is deeper. All National Highways shall be cased crossing installed
 by boring method other road will be crossed without casing.
- Standard pipe belt can be used and demonstration will be carried out so that pipe coating
 is not damaged and non-abrasive pipe belt will be used. No slings will be put around the
 field joint.
- There will be underground valve chambers (1m X 1.5 M) at an interval of 3KM with top cover leveled to road level.
- As per standard pipe markers will be at place.

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C METHODOLOGY FOR RESTORATION

1. Restoration:

Workspace will be cleaned of all scrap and debris and restored to such stable and usable condition of the right of way prior to laying of the pipeline. We will restore the original shoreline contours and conditions to the satisfaction of land owner and Governmental Agencies having jurisdiction over the area and will obtain the NOC from the land owner and all.

2. Surplus Material:

Contractor will collect and return the entire surplus and defective materials, as per provision of contract, for company supplied materials, after completion of work at company's designated stock pile areas. The reconciliation of surplus free issue line pipe shall be as per requirements of commercial condition of contract.

3. Disposal:

- All surplus and defective materials and all trash, and spoiled materials will be collected and disposed.
- The ROW will be cleared of all rubbish, broken skids, empty cans, card board, sacks, stumps, trash and leftover construction material. All burnable matter shall be burnt. If burning is not allowed, Contractor will haul the clean-up material to an approved dumping area. All scrap metal and unburnable material will be disposed of, in an appropriate manner, but never be buried in theROW.
- All loose stone and rock exposed by the construction operations and scattered over the ROW or adjacent grounds will be removed by Contractor and shall be transported to a location considered suitable by the land owner and/or tenant, or by authorities having jurisdiction, for satisfactory disposal. For stones, gravel or other hard material which may be buried in the trench the provisions of the specifications will apply with the understanding that the use of the land by the land owner and/or tenant shall not be interfered with Special precautions willbe taken near steep slopes prone to erosion and landslides. Necessary stepsshall be taken to ensure the rapid growth of grass by providing wicker barriers and by regulating the drainage of surface waters.
- The ROW and the backfilled trench in particular will be finished in such ways that after settlement
 of the soil, the road surface are at their nearest possible original level.

D. METHODOLOGY FOR BACKFILLING

- Backfilling will not be done until the pipe and appurtenances have been properly fitted and the
 pipe is according to the ditch profile at the required depth that will provide the required cover and
 it is not riding upon any stone, hard core etc., and has a bed which is free of extraneous material
 and which allows the pipe to rest smoothly and evenly.
- Backfilling will be carried out immediately after the pipeline has been laid in the trench except field joint locations.
- The backfill material will be soil, sand, clay or other materials containing no materials which could
 damage the pipe and/or coating or leave voids in the backfilled trench & even backfill material
 will not disturb or harm the surrounding area/Environment.
- Warning mat will be provided at depth of 0.5 mtr. From the ground level.
- The surplus material will be neatly crowned directly over the trench and the adjacent excavated
 areas on both sides of the trench to such a height, which will, provide for future settlement of the
 trench backfill during the maintenance period and thereafter
- The crown will be high enough to prevent the formation of the depression in the soil when backfill
 has settled into its permanent position.





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Adani Total Gras

V.BAKTHASENAN R.C. NO: 3105/81/03-6 CUDDALORE-2 CT 567332

Rs: 100.....

AGREEMENT REGARDING GRANTING OF RIGHT OF WAY PERMISSIONS FOR LAYING UTILITY SERVICES ON NATIONAL HIGHWAYS

Agreements to lay 8" Ø (219 mm) Carbon Steel Gas Pipeline & MDPE 125 mm across NH-45A (Chennai - Nagapattinam Highway).

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Whereas the Authority is responsible, inter-alia, for development and maintenance of lands in

Across Chainage: -

NH-45A @ 70+716 KM (R.H.S to L.H.S)

Whereas the Licensee proposed to lay underground 8" Ø (219 mm) Carbon Steel Gas Pipeline & MDPE 125 mm across NH-45A (Chennai - Nagapattinam Highway).

Whereas the Licensee has applied to the authority for permission to lay utility services

Across Chainage: -

NH-45A @ 70+716 KM (R.H.S to L.H.S)

And whereas the Authority has agreed to grant such permission for way leave on the NHAI RoW as per terms and conditions hereinafter mentioned.

Now this agreement witnessed that in consideration of the conditions hereinafter contained and on the part of the Licensee to be observed and performed, the Authority hereby grants to the Licensee permission to lay utility services as per the approved drawing attached hereto subject to the following conditions, namely.

- ROW permissions are only enabling in nature. The purpose of extending the way leave facility on the National Highway ROW is not for enhancing the scope of activity. A utility service provider, either by content or by intent. Further, enforceability of the permission so granted shall be restricted only to the extent of provisions/scope of activities defined in the license agreement & for the purpose for which it is granted.
- No Licensee shall claim exclusive right on the ROW and any subsequent user will be permitted to use the ROW, either above or below, or by the side of the utilities laid by the first user, subject to technical requirements being fulfilled. Decision of the Authority in relation to fulfillment of technical requirements shall be final and binding on all concerned parties. In case any disruption/ damage is caused to any existing user by the subsequent user, the Authority shall not be held accountable or liable in any manner.
- 3. The Licensee shall be responsible for undertaking all activities including, but not limited to site identification, survey, design, engineering, arranging finance, Project management, obtaining regulatory approvals & necessary clearances, supply of equipment, material, construction, erection, testing and commissioning, maintenance and operation and all other activities essential or required for efficient functioning of their own utility industrial infrastructure facilities.

- 4. The Licensee shall pay license fees @ Rs....... /sqm/month i.e., total amount Rs. to the Authority. The Licensee fee shall become payable from the date of handing over of ROW land to the Licensee, for laying of utilities/ cable /conduits / pipelines for infrastructure/ service provider. As regards Tariff and Terms and conditions for providing common utility ducts along National Highways, there shall be a separate agreement regime.
- 5. Fee shall have to be paid in advance for the period for which permission is granted for entering into a licensee agreement. In case of renewal, rate prevailing at the time of renewal shall be charged. Delay in deposition of fee shall attract interest @ 15% per annum compounded annually.
- Present policy of the MoRTH is to provide a 2.00m wide utility corridor on either side of the extreme edge of ROW. In case of where utility ducts with sufficient space are already available along NH, the utility services shall be laid in such ducts subject to technical requirements being fulfilled.
- 7. The utility services shall be laid at the edge of the ROW. In case of restricted width of ROW, which may be adequate only to accommodate the carriageway, central verge, shoulders, slopes of embankment, drains, other road side0 furniture etc, the utility services shall be laid beyond the toe line of the embankments and clear of the drain.
- 8. The Licensee shall make his own arrangement for crossing of cross drainage structure, rivers etc. below the bed. In case, this is not feasible, the utility services may be carried outside the railing/parapets and the bridge superstructure. The fixing and supporting arrangement with all details shall be required to be approved in advance from the concerned Highway Administration. Additional cost on account of fixing and supporting arrangement as assessed by the Authority shall be payable by the Licensee.
- 9. In exceptional cases, where ROW is restricted the utility services can be allowed beneath the carriageway of service road, if available, subject to the condition that the utility services be laid in concrete ducts, which will be designed to carry traffic on top. The width of the duct shall not be less than one lane. In such cases, it also needs to ensure that maintenance of the utility services shall not interfere with the safe and smooth flow of traffic. The cost of operation & maintenance will have to be borne by the Licensee.
- 10. It is to be ensured that at no time there is interference with the drainage of the road land and maintenance of the National Highways. Towards this, the top of the utility services shall be at least 0.6 meter below the ground level. However, any structure above ground shall be aesthetically provided for/ landscaped with required safety measures as directed by the concerned Authority.
- 11. The utility services shall be permitted to cross the National Highway either through structure or conduits specially built for that purpose. The casing/ conduit pipe should, as minimum, extend from drain to drain in cuts and toe of slope to toe of slope in the fills and shall be designed in accordance with the provision of IRC and executed following the Specifications of the Ministry.

- 12. Existing drainage structures shall not be allowed to carry the lines across.
- 13. The top of the casing / conduit pipe containing the utility services to cross the road shall be at least 1.2m below the top of the sub grade or the existing ground level whichever is lower, subject to being at lease 0.3m below the drain inverts. A typical sketch showing the clearances is given in Attachment I.
- The utility services shall cross the National Highway preferable on a line normal to it or as nearly so as practicable.
- 15. The casing / conduit pipe for crossing the road may be installed under the road embankment either by boring or digging a trench. Installation by boring method shall be preferred.
- 16. In case of trenching, the sides of the trench should be done as nearly vertical as possible. The trench width should be at least 30cm but not more than 60cms wider than the outer diameter of the pipe. Filling of the trench shall conform to the specifications contained herein below or as supplied by the Highway Authority.
 - a. Bedding shall be to a depth not less than 30cm. It shall consist of granular material free of lumps, clods and cobbles, and graded to yield a firm surface without sudden change in the bearing value. Unsuitable soil and rock edges should be excavated and replaced by selected material.
 - b. The backfill shall be completed in two stages (i) Side fill to the level of the top of the pipe (ii) Overfill to the bottom of the road crust.
 - c. The side fill shall consist of granular material laid in 15cm. Layers each consolidated by mechanical tamping and controlled addition of moisture to 95% of the Proctor's Density. Overfill shall be compacted to the same density as the material that had been removed. Consolidation by saturation or pounding will not be permitted.
 - d. The road crust shall be built to the same strength as the existing crust on either side of the trench or to thickness and specifications stipulated by the Highway Authority.
- 17. The Licensee shall ensure making good the excavated trench for laying utility services by proper filling and compaction, so as to restore the land into the same condition as it was before digging the trench, clearing debris/ loose earth produced due to execution of trenching at least 50m away from the edge of the right of way.
- 18. All required restoration work subsequent to laying of the cable shall be required to be undertaken by the Licensee at its cost either by itself or through its authorized representative in consultation with the Authority as per predetermined time schedule and quality standards.
- 19. Prior to commencement of any work on the ground, a performance Bank Guarantee @ Rs Per route meter/ Rs......per sqm with a validity of one year initially (extendable if required till satisfactory completion of work) shall

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have to be furnished by the Licensee to the Authority/ its designated agency as a security against improper restoration of ground in terms of filling/unsatisfactory compaction damages caused to other underground installations/ utility services & interference, interruption, disruption or failure caused thereof to any services etc. In case of the Licensee failing to discharge the obligation of making good of the excavated trench/other restoration work, the Authority shall have a right to make good the damages caused by excavation, as the cost of the Licensee and recover the amount by for feature of the Bank Guarantee.

- 20. In case, the Performance Bank Guarantee is invoked as mentioned above, the Licensee shall be required to replenish and reinstate the required Performance Bank Guarantee within one month of such invoking. In case the work contemplated herein is not completed to the satisfaction of the Authority, which has granted the permission, within a period of 11 months from the date of issue of the Bank Guarantee, the Licensee shall either furnish a fresh guarantee or extend the guarantee for a further period of one year. Notwithstanding this, the Licensee shall be liable to pay full compensation to the aggrieved Authority its designated agency for any damage sustained by them by reason of the exercise of the ROW facility.
- 21. The Licensee shall shift the utility services within 90days for as specified by the respective Authority from the date of issue of the notice by the concerned Authority to shift/ relocate the utility services, in case it is so required for the purpose of improvement / widening of the road/ route highway of construction of flyover / bridge and restore the road / land to its original condition at his own cost and risk.
- 22. The Licensee shall be responsible to ascertain from the respective agency in co-ordination with Authority, regarding the location of other utilities / underground Installations/ facilities etc. The Licensee shall ensure the safety and security of already existing underground installations/ utilities/ facilities etc before commencement of the excavation/ using the existing cable ducts. The Licensee shall procure insurance from a reputed insurance company against damages to already existing underground installations / utilities / facilities etc.
- 23. The Licensee shall be solely responsible/ liable for full compensation/ indemnification of concerned agency/ aggrieved Authority for any direct, indirect or consequential damage caused to them/ claims or replacements sought for at the cost and risk of the Licensee. The concerned agency in co- ordinate with Authority shall also have a right make good such damages/ recover the claims by forfeiture of Bank Guarantee.
- 24. If the Licensee fails to comply with any condition to the satisfaction of the Authority the same shall be executed by the Authority at the cost and risk of the Licensee.
- 25. Grant of Licensee is subject to the Licensee satisfying (a) minimum disruption of traffic and (b) no damage to the highways. As far as possible, the Licensee should avoid cutting of the road for crossing highway and other roads and try to carry out the work by trenchless technology. In case any damage is caused to the road

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pavement in this process, the Licensee will be required to restore the road to the original condition at its cost. If due to unavoidable reasons the road needs to be cut for crossing or laying utility services, the Licensee has to execute the restoration work in a time bound manner at its cost either by itself or through its authorized representative in consultation with the Authority as per predetermined time schedule and quality standards. In case of the Licensee failing to discharge the obligation of making good of the excavated trench/ other restoration work, the Authority shall have a right to make good the damages caused by excavation, at the cost of the Licensee and recover the amount by forfeiture of the Bank Guarantee.

- 26. The Licensee shall inform/ give a notice to the concerned agency designated by the Authority at least 15 day in advance with route details prior to digging trenches for fresh or maintenance / repair works. A separate performance Bank Guarantee for maintenance/ repair works shall have to be furnished by the Licensee.
- 27. Each day, the extent of digging the trenches should be strictly regulated so that utility services are laid and trenches filled up before the close of the work that day. Filling should be completed to the satisfaction of the concerned agency designed by the Authority.
- 28. The licensee shall indemnify the concerned agency in co-ordination with Authority, against all damages and claims, if any due to the digging of trenches for laying cables/ ducts.
- 29. The permission for laying utility services is granted maximum for 5 years at a time, which can thereafter be considered for renewal. On payment of additional fee at the time of renewal, the permission shall automatically be renewed, unless defaults exist. In case of renewal, rate prevailing at the time of renewal shall be charged. Delay, in deposition of fee shall attract interest @ 15% per annum compounded annually.
- 30. The permission shall be valid only for the period it is issued, and fee deposited. However, the Authority also has a right to terminate the permission or to extend the period of Agreement.
- 31. That the Licensee shall not undertake any work of shifting, repairs or alterations to the utility services without prior written permission of the concerned agency in co-ordination with the Authority.
- 32. The permission granted shall not in any way be deemed to convey to the Licensee any ownership right or any interest in route/road/highway land/ property, other than what is herein expressly granted. No use of NH ROW will be permitted for any purpose other than that specified in the Agreement.
- 33. During the subsistence of this Agreement, the utility services located in highway land/ property shall be deemed to have been constructed and continued only by the consent and permission of the Authority so that the right of the Licensee to the use thereof shall not become absolute and indefeasible by lapse of time.

- 34. The Licensee shall bear the Stamp Duty charged on this Agreement.
- 35. Three copies of 'as laid drawings of utilities (hard and soft copies) with geo-tagged photographs and geo-tagged video recordings of laying of cables in the trench (with respect to the NH) and after complete restoration shall be submitted to the Authority for verification and record within a month of completion of works.
- 36. The Licensee shall always allow free access to the site to the authorized representatives of Authority to inspect the Project facilities and to investigate any matter within their Authority, and upon reasonable notice, shall provide reasonable assistance necessary to carry out their respective duties and functions.
- 37. The utility services shall not be made operational by the Licensee unless a completion certificate to the effect that the utility services has been laid in accordance with the approved specifications and drawings and the trenches have 'been filled up to the satisfaction of the concerned agency in co- ordination with the Authority has been obtained. Notwithstanding anything contained herein, this Agreement may be cancelled at any time by Authority for breach of any condition of the same and the Licensee shall neither be entitled to any compensation for any loss caused to it by such cancellation not shall it be absolved from any liability already incurred.
- 38. The Licensee shall ensure adherence to relevant Indian standards and follow best industry practices, methods and standard for the purpose of ensuring the safe, efficient and economic design, construction, commissioning, operation, repair and maintenance of any part of the utility lines/ industrial infrastructure facilities and which practices, methods and standards shall be adjusted as necessary to take account of.
 - a. Operation, repair and maintenance guidelines given by the manufactures.
 - b. The requirements of Law
 - c. The physical conditions at the site and
 - d. The safety of operating personnel and human beings.
- The Licensee shall have to provide safety measures like barricading, danger lighting and other necessary caution boards while executing the work.
- 40. While laying utility services, at least one lane of road shall be always kept open to traffic. In case of single lane roads, a diversion shall be constructed. If any traffic diversion works are found necessary during the working period such diversion shall be provided at the cost of Licensee.
- 41. After the termination/ expiry of the agreement, the Licensee shall remove the utility services within 90 days and the site shall be brought back to the original condition failing which the Licensee will lose the right to remove the utility services. However, before taking up the work of removal of utility services and Licensee shall furnish a Bank Guarantee to the Authority for a period of one year for an amount assessed by the Authority as a security for making good the excavated trench by proper filling and compaction, clearing debris, loose earth produced due to excavation of trenching at least 50m away from the edge of the ROW.

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- 42. Any disputes in interpretation of the terms and conditions of this Agreement or their implementation shall be referred to the redress mechanism prevailing in the Ministry and the decision of the redress mechanism shall be final and binding on all.
- 43. For PPP Projects, in case of any financial loss incurred by the respective project concessionaries due to such laying/ shifting of utility services by the Licensee, compensation for the same shall be required to be borne by the Licensee in mutual agreement with the respective project concessionaries. MoRT&H/ NHAI/ implementing authorities for the project shall not be liable to the concessionaire in any way in this regard.

This agreement has been made in duplicate, each on a Stamp Paper, each party to this Agreement has retained one stamped copy each.

IN WITNESS WHEREOF THE PARTIES HERE TO HAVE CAUSED THIS AGREEMENT TO BE EXECUTED THROUGH THEIR RESPECTIVE AUTHORISED REPRESENTATIVES THE DAY AND THE YEAR FIRST ABOVE WRITTEN.

SIGNED SEALED AND DELIVERED FOR AND ON BEHALF OF AUTHORITY.

BY SHRI

AL C

SIGNED ON BEHALF OF M/s. Adami Total Gas Limited (LICENSEE)

BY SHRI Rajesh Prabhu Senior Vice President (Projects)

(CUDDALORS)

(Signature, Name & Address with Stamp)

HOLDER OF GENERAL POWER OF ATTORNEY
EXECUTED IN ACCORDANCE WITH THE RESOLUTION NO......
DATED PASSED BY THE BOARD OF DIRECTORS IN THE MEETING HELD ON

IN THE PRESENCE OF (WITNESSES):

Heme Kill

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தமிழ்நாடு तमिलनाडु TAMIL NADU

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UNDERTAKING

Cudde love

We M/s. ADANI TOTAL GAS LIMITED, Adani House, Nr Mithakhali Circle, Navrangpura, Ahmedabad, 380009. Laying of steel and MDPE pipeline in NH-45A (Chennai - Nagapattinam Highway) along the road from Across NH45A at NH.CH: 70+716 Km (Right Side to Left Side), a total length of 30 meters in the State of Tamil Nadu.

We hereby undertake the Standard Conditions of NHAI Guidelines

Not damage to other utility. If damaged, then to pay the losses either to NHAI
to the concerned agency. Regarding the location of other cables, underground
installation/ utilities etc. M/s. ADANI TOTAL GAS LIMITED shall be responsible to
ascertain from the respective agency in co-ordination with NHAI. M/s. ADANI
TOTAL GAS LIMITED shall ensure the safety and security of already existing cables
/ underground installation / utilities facilities etc. before commencement of the
excavation.



2. Renewal of Bank Guarantee: M/s. ADANI TOTAL GAS LIMITED shall furnish a Bank Guarantee @ Rs. 100/- per running meter to the NHAI, for a period of one year initially (extendable required till satisfactory completion of work) as security for ensuring/making good the excavated trench for laying the pipeline/ducts by proper filling and compaction, clearing debris/loose earth produced due to execution of trenching at least 50m away from the edge of the right of way. No payment shall be payable by the NHAI to M/s. ADANI TOTAL GAS LIMITED for. Clearing debris/ loose earth. In case the work contemplated herewith is not completed to the satisfaction of the NHAI, which has granted the permission within a period of 11 months from the date of issue of the Bank Guarantee the M/s. ADANI TOTAL GAS LIMITED shall either furnish a fresh guarantor or extend the guarantee for a further period of one year. In case of the M/s. ADANI TOTAL GAS LIMITED failing to discharge the obligation of making good the excavated, at the cost of the M/s. ADANI TOTAL GAS LIMITED and recover the amount by invoking the Bank Guarantee furnished by the M/S. ADANI TOTAL GAS LIMITED.

3. Confirming all standard conditions of NHAI:

- The period of validity of way permission shall be co-terminus with the validity of license given by the Ministry of Petroleum & Natural Gas/MoPNG.
- II. The pipeline shall be laid at the edge of the right of way within 2m utility corridors.
- III. The top of the casing conduit pipe containing the MS Pipes shall be at least 1.2m below the surface of the road subject to being at least 0.3m below the drain inverts.
- IV. The Licensee has to cross the NH by horizontal drilling method (trenchless technology only). In case any damage is caused to the road pavement in this Process. M/s. ADANI TOTAL GAS LIMITED will be required to restore the same to the original conditions at his own cost.
- Existing CD works shall not be allowed for laying Natural Gas pipeline and shall crossed by HDD method only.
- VI. No trenching will be done on link road, boring method will be used in link road and cable will be laid at the extreme edge of the road in the non-BT surface only.
- VII. The licensee shall inform/give a notice to the NHAI, Govt. of India or its authorized agency at least 15 days, in advance with route details prior to digging trenches for fresh or maintenance/repair work. A separate work plan and a separate Performance Bank Guarantee Rs. 100/- per running meter length for maintenance/repair work shall have to be furnished by the M/S ADANI TOTAL GAS LIMITED.
- VIII. Each day, the extent of digging the trenches should be strictly regulated so that pipeline is laid and trenches filled up before the close of the work that day. Filling should be completed to the satisfaction of the concerned agency.
 - IX. The licensee shall indemnify the concerned agency in co-ordination with NHAI, against all damages and claims, if any, due to the digging of trenches for laying pipeline.
 - X. The NHAI has a night to terminate the permission or to extend the period of agreement in case the M/S. ADANI TOTAL GAS LIMITED wants shifting, repairs or alteration to pipeline, he will have to furnish a separate bank guarantee.

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- XI. The licensee shall not without prior permission in writing from the NHAI Govt. of India or its authorized agency undertake any work of shifting, repairs or Alterations to the said pipeline/ducts.
- XII. The permission granted shall not in any way be deemed to convey to the M/s. ADANI TOTAL GAS LIMITED any ownership right or any interest in route / road/highway / land / property, other than what is herein expressly granted.
- XIII. During the subsistence of this agreement, the laying pipeline/ ducts located in highway land / property shall be deemed to have been constructed and continued only by consent and permission of the NHAI so that the right of the M/s. ADANI TOTAL GAS LIMITED to the use thereof shall not become absolute indefeasible by laps of time.
- XIV. The M/s. ADANI TOTAL GAS LIMITED shall bear the stamp duty charged for the agreement.
- XV. The steel pipeline shall not be brought in to use by M/s. ADANI TOTAL GAS LIMITED unless a completion certificate to the effect that the laying pipeline / duct has been laid in accordance with the approved specifications and drawings and the trenches have been filled up to the satisfaction of the concerned agency in coordination with the owner has been obtained.
- XVI. Notwithstanding anything NHA obtained herein this agreement may be cancelled at any time by for breach of any condition of the same and the M/s. ADANI TOTAL GAS LIMITED shall neither be entitles to any compensation for any loss caused it to it by such cancellation not shall it be absolved from any liability already incurred.
- XVII. The licensee shall have to provide barricading, danger lighting and other necessary caution boards while executing the work and during maintenance. If NHAI is required to do some emergency work the M/s. ADANI TOTAL GAS LIMITED will provide an observer within 24 hours. NHA will not be responsible for any damage of any kind by whatsoever means natural or otherwise.
- XVIII. The enforceability of the right of way permission granted herein shall be restricted to the extent of provisions/ scope of service contained/ defined in the licensed agreement of the license with department of PNGRB/MoPNG and for the purpose for which it is granted. Either by content or by intent, the purpose extending this right of way facility is not to enhance the scope of M/s. ADANI TOTAL GAS LIMITED of the department of PNGRB/MoPNG.
 - 4. Shifting of pipes as and when required by NHAI: M/s. ADANI TOTAL GAS LIMITED shall shift the pipes/ducts within 90 days (or as specified by the respective agency/owner) from the date of issue of the notice by the NHAI, Govt. of India to shift / relocate the pipeline/ducts, in case it is so required for the purpose of improvement / widening of the road / route / highway or construction of flyover / bridges and restore the road / land to its original conditions at his own cost and risk.
 - 5. Shifting due to 6 lane/widening of NH: After the termination/expiry of the agreement, the M/s. ADANI TOTAL GAS LIMITED shall remove the pipeline within 90 days and the site shall be brought back to the original condition failing which M/s. ADANI TOTAL GAS LIMITED will lose the right to remove the pipeline. However before taking up the work of removal of pipeline the M/s. ADANI TOTAL

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GAS LIMITED shall furnish a bank guarantee to the owner for a period of one year for an amount assessed by the Owner for making good the excavated trench by proper filling and compaction clearing debris, loose, earth produced due to excavation of trenching at least 50m away from the edge of the right of way.

- Traffic Movement during laying of pipeline to be managed by the applicant:
 If any traffic diversion work is found necessary during the working period such diversion shall be provided at the cost of M/s ADANI TOTAL GAS LIMITED.
- 7. If any claim is raised by the concessionaire then the same has to be paid by the applicant: The M/S ADANI TOTAL GAS LIMITED shall be solely responsible liable for full compensation/ indemnification of concerned agency/ aggrieved owner for any direct, indirect or consequential damage caused to them/ claims or replacement sought for at the cost and risk of the M/s. ADANI TOTAL GAS LIMITED, The concerned agency in co-ordination with NHAI shall also have a right to make good such damages/ recover the claims by way of invoking of Bank Guarantee furnished by the M/s. ADANI TOTAL GAS LIMITED. If the M/s. ADANI TOTAL GAS LIMITED fails to comply with the condition 5 and 6 above to the satisfaction of the NHAI, the same shall be, got executed by the NHAI at the risk and cost of the Ms. ADANI TOTAL GAS LIMITED.
- We M/s. ADANI TOTAL GAS LIMITED, hereby undertake that to pay the fee/rent as mentioned in the Ministry's Guidelines Lr.No.RW/NH-33044/29/2015-S&R (R) dated 22.11.2016 as and when asked by NHAI.
- We M/s. ADANI TOTAL GAS LIMITED hereby undertake that the HDD method will be adopted for crossings of all crossroads at grade separators, at grade junctions and wherever required and in the build-up areas as per the instructions of NHA official.
- 10. Lr.NO.RW/NH-33044/29/2015-S&R(R) dated 22.11.2016 as and when asked by NHAI. Reference Circular issued by Ministry of Road Transport & Highways, GOI Circular No. RW/NH-33044/29/2015-S&R(R) dated 22.11.2016. Where in, the last paragraph that "The Highway Administration Rules 2004 will be modified accordingly. This circular will come into effect from the date of notification of the modified Highway Administration Rule". So we hereby give our consent to abide by the content of this Circular from the date of its notification by MORTH, GOI and agree to pay the ground rent any other charges applicable for the section as applied by us.

Shri. Rajesh Prabhu Senior Vice President (Projects) Adani Total Gas Limited

==== who



ABSTRACT

Industries – City Gas Distribution Projects (CGD) – General guidelines for grant of permission – Orders – Issued.

Industries (MIA.1) Department

G.O.(Ms)No.127

Dated 27.05.2020 சார்வரி வருடம், வைகாசி 14 திருவள்ளுவர் ஆண்டு 2051,

Read:

- From the Head Technical Services, AG&P CGD India Pvt Ltd, Letter No.AGPCGD/TS/2019 – 21 / 016, Dated 03.10.2019.
- From the Project Co-ordinator, Torrent Gas Private Limited, Letter No. TGPL/NGT/CGD/2019-20/047, Dated 14.10.2019
- From the Director of Rural Development and Panchayat Raj Department, Letter Rc.No.67316/2019/PRI-3.1, Dated 29.02.2020.
- From the Commissioner of Municipal Administration, Letter R.C.No.529/2020/E.3, Dated 10.03.2020
- From the Chief Engineer(C&M) Highways Department, Letter No.2020/Salai/2020, dated: 11.03.2020

ORDER:-

The Ministry of Petroleum and Natural Gas Department, Government of India has authorised City Gas Distribution Projects in the following 9 Geographical Areas in Tamil Nadu

S.No	Geographical Area(GA)	Authorized Entity Torrent Gas Private Limited		
1.	Nagapattinam District			
2.	Kanchipuram District	Consortium of AG & P LNG Marketing PTE Limited & Atlantic Gulf & Pacific		



3.	Chennai & Tiruvallur Districts	Torrent Gas Private Limited	
4.	Coimbatore District	Indian Oil Corporation Limited	
5.	Cuddalore Nagapattinam & Tiruvarur Districts	Adani Gas Limited	
6.	Ramanathapuram District	Consortium of AG & P LNG Marketing PTE Limited & Atlantic Gulf & Pacific	
7.	Salem District	Indian Oil Corporation Limited	
8.	Tiruppur District	Adani Gas Limited	
9.	Vellore District	Consortium of AG & P LNG Marketing PTE Ltd. & Atlantic Gulf & Pacific	

- In the letters first and second read above, the AG & P CGD India Pvt. Ltd and Torrent Gas Private Ltd had requested facilitation for implementation of City Gas Distribution Network Projects in the State of Tamil Nadu.
- Subsequently, it was decided in the meeting convened under the chairmanship of Chief Secretary to Government held on 5.11.2019 and 13.2.2020 to frame a Common guidelines / instructions for implementation of City Gas Distribution Projects in Tamil Nadu.
- 4. In the letters third to fifth read above, Director of Rural Development and Panchayat Raj Department, the Commissioner of Municipal Administration and the Chief Engineer (C&M), Highways Department have furnished restoration charges for the Rural Development and Panchayat Raj Department Roads, Municipal Roads and Highways Roads respectively.
- 5. After careful consideration and deliberations the Government hereby issue the following common guidelines / instructions for grant of permission to lay city Gas Distribution Projects and to fix the restoration charges as follows:

I. Restoration charges for Roads under the Rural Development and Panchayat Raj Department

SI. No.	Types of Surface	Cost per KM (Rs.)
1.	Road shoulders	2,86,000
2.	BT Roads	14,63,000



3.	WBM Roads	11,73,000
4.	CC Roads	21,75,000

II. Restoration charges for Municipal Roads

SI.No.	Types of Surface	Cost per KM (Rs.)
1.	BT Roads	20,00,000
2.	CC Roads	21,75,000
3.	Paver Block Roads	17,00,000
4.	Earthern Roads	3,10,000
5.	WBM Roads	4,40,000

III. Restoration charges for Highways Roads

SI.No.	Types of Surface	Cost per KM (Rs.)
1.	BT Roads	20.11 lakhs
2.	Berms	6.07 lakhs
3.	Paver block roads	17.50 lakhs

IV.General

- a) All departments of State Government and local bodies shall extend full co-operation for laying City Gas Pipelines.
- b) For road cuts, upfront restoration charges will be collected from City Gas Distribution Companies by the department / local body owning the road at rates fixed above.
- c) The road cut restoration charges fixed above shall be valid for a period of three financial years from 2020-2021 onwards.
- d) The cost of shifting of utilities, if involved, will be met by the City Gas Distribution Company.
- e) Once an application for road cut is submitted to Divisional Engineer (Highways) or the concerned local body with payment at the rate per kilometer fixed above, if any further payment is required from the City Gas Distribution Company on account of shifting of utilities, the amount must be informed to the City Gas Distribution Company within 10 days of application.
- f) Once all payments are made by the City Gas Distribution Company, requisite permission for road cut must be issued within 10 days of receipt of payment.



- g) Track rent charges fixed and revised from time to time by Government in Revenue and Disaster Management Department shall be applicable.
- h) Land required for ancillary infrastructure will be allotted on lease, for such number of years as requested by companies as per existing rules.
- i) A District Level Monitoring Committee (DLMC) headed by the District Collector will monitor the progress of City Gas Distribution works. The District Level Monitoring Committee shall consist of the Superintendent of Police, Divisional Engineer (Highways), Assistant Director (Panchayat) and all the Municipal Commissioners of the relevant towns/cities. The District Level Monitoring Committee must meet once in two months and the representative of the City Gas Distribution Company / Companies operating in the District must be invited for this meeting.
- j) Highways and Minor Ports Department, Rural Development and Panchayat Raj Department and Municipal Administration and Water Supply Departments may issue additional operational guidelines if necessary, in addition to the guidelines prescribed above on the aspects like future road expansion, co-existence with other utilities, period of pipeline laying and public safety. However no City Gas Distribution Pipeline laying permission shall be withheld solely an account of absence of issue of such guidelines.
- k) The City Gas Distribution Companies while laying and maintaining gas pipelines, shall comply with all applicable national norms.
- The above fixed rates and guidelines will be applicable to all further the City Gas Distribution projects also.

(BY ORDER OF THE GOVERNOR)

N.MURUGANANDAM, PRINCIPAL SECRETARY TO GOVERNMENT.

To

The Additional Chief Secretary to Government, Rural Development and Panchayat Raj Department, Secretariat, Chennal – 600 009.



The Additional Chief Secretary to Government, Municipal Administration and Water Supply Department, Secretariat, Chennai – 600 009.

The Additional Chief Secretary to Government, Revenue and Disaster Management Department, Secretariat, Chennai – 600 009.

The Principal Secretary to Government, Highways and Minor Ports Department, Secretariat, Chennai – 600 009.

The Director of Rural Development and Panchayat Raj Department, Panagal Building, Saidapet, Chennai -600 015.

The Commissioner of Municipal Administration, 75, Santhom Road, R.A.Puram, Chennal – 600 028.

The Chief Engineer (C&M), Highways Department, Guindy, Chennai - 600 025.

Copy to:

The O/o Hon'ble Chief Minister, Secretariat, Chennal - 600 009.

AG&P CGD India Pvt Ltd, No.23, Rajiv Gandhi Salai (OMR), 1st Floor, Building No Core 2, Pacifica Tech Park, Navalur, Chennai – 600 130.

Torrent Gas Private Limited, "Global Towers" 1st Floor, No.42, Jawaharlal Nehru Street, Karaikal - 609 605.

Industries (OP.II) Department, Secretariat, Chennai - 600 009.

Stock File / Spare Copy.

// Forwarded / By Order //

SECTION OFFICER



PNGRB/CGD/BID/9/2018/GA/64/Tamil Nadu —Bid Evaluation पेट्रोलियम एवं प्राकृतिक गैस विनियामक बोर्ड Petroleum and Natural Gas Regulatory Board प्रथम-तल, वर्ल्ड ट्रेड सेंटर, बाबर रोड, नयी दिल्ली - 110001

1st Floor, World Trade Centre, Babar Road, New Delhi - 110001

To

28th September, 2018

Adani Gas Limited, Heritage Building, 8th Floor, Ashram Road, Usmanpura, Ahmedabad- 380014

Subject: Grant of Authorization to Adani Gas Limited for development of City Gas Distribution Network in the Geographical Area of Cuddalore, Nagapatinam & Tiruvarur Districts.

Sir,

With reference to PNGRB communication of even number dated 13.9.2018 for schedule-D, the PBG reference of your letter dated 17.08.2018 may be read as dated 10.09.2018

2. All other terms and conditions shall remain unchanged.

Yours faithfully,

(Arvind Kumar)
Additional Advisor



PNGRB/CGD/BID/9/2018/GA/64/Tamil Nadu -Bid Evaluation पेट्रोलियम एवं प्राकृतिक गैस विनियामक बोर्ड Petroleum and Natural Gas Regulatory Board

प्रथम-तल, वर्ल्ड ट्रेड सेंटर, बाबर रोड, नयी दिल्ली - 110001 Ist Floor, World Trade Centre, Babar Road, New Delhi — 110001

13th September, 2018

To Adani Gas Limited, Heritage Building, 8th Floor, Ashram Road, Usmanpura, Ahmedabad- 380014

Subject: Grant of Authorization to Adani Gas Limited for development of City Gas Distribution Network in the Geographical Area of Cuddalore, Nagapatinam & Tiruvarur Districts.

Sir.

With reference to submission of Performance Bank Guarantee for Rs. 33 crores vide your letter dated 17.08.2018, as per the requirement under Regulation 10(1) of the Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand City or Local Natural Gas Distribution Networks) Regulations, 2008, please find enclosed authorization in Schedule D for the GA of Cuddalore, Nagapatinam & Tiruvarur Districts in duplicate.

- The tariff applicability is as per the Judgment of Hon'ble Supreme Court of India in the SLP No. 22273 of 2012.
- You are requested to put your stamp & signature on each page of the document and return one copy, within 7 days of receipt of this communication, to the PNGRB for records.
- The enclosed authorization issues with the approval of the Board.

Yours faithfully,

Encl: As above

(Arvind Kumar) Additional Advisor

अर्थिन्द कुमार ARVIND KUMAR अपर शताहकार Additional Advisor द्वितान और प्राकृतिक गैश विशेषानक बोर्ज 'stroloum & Natural Gas Regulatory Board प्रधान ताल जन्में हुँच शैन्दर 1st Floor, World Trade Centre बाबर शेंड, नई हिस्ती—110001 Babur Road, New Delbi, 110001

Schedule D

[see regulations 10 (1) and 18 (7)]

Grant of authorization for laying, building, operating or expanding CGD network

To Adani Gas Limited, Heritage Building, 8th Floor, Ashram Road, Usmanpura, Ahmedabad- 380014

Subject: Grant of Authorization to Adami Gas Limited for development of City
Gas Distribution Network in the Geographical Area of Cuddalore,
Nagapatinam & Tiruvarur Districts.

Sir.

With reference to your application-cum-bid for grant of authorization for laying, building, operating or expanding the CGD network in Cuddalore, Nagapatinam & Tiruvarur Districts in the state of Tamil Nadu, it has been decided to grant you the authorization subject to the Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand City or Local Natural Gas Distribution Networks) Regulations, 2008 and the following terms and conditions:

- The Authorised Area for laying, building, operating or expanding the proposed CGD Network shall cover an area of <7436.00> square kilometre and as depicted in the enclosed drawing or map,
- The activities of laying, building, operating or expansion of the CGD Network shall commence immediately after the issuance of this authorisation.
- The activities permitted above shall have to be completed as per the work programme mentioned below, namely: -

Serial Number	Description of Work	Numbers	
1	years from the date of authorisation Number of domestic Piped Natural Gas connections		
2			
3	Inch-km of steel pipeline to be laid within 8 contract years from the date of authorisation	839	

SIV विन्द कुमार ARVIND KUMAR STR राहार करि Additional Advisor दिविता और सक्तिक में कि प्रिकाक केंद्र ट्रांडियम और सक्तिक पंजा Regulstory Board प्रथम सहा, कर्म दे हैं केंद्र 1st Floor, World Trade Centre बाहर मेंद्र, मेंद्र क्रिकी—110001 Gaber Road, New Delhi-110001 bor



The entity shall be required to achieve the year-wise work programme within 8 contract years as per details given below:

PNG Connections (cumulative)		CNG Stations (cumulative)		Inch-km of steel pipeline (cumulative)	
By the end of contract year	% of work program	By the end of contract year	% of work program	By the end of contract year	% of work program
1 st	Nil	1 st	Nil	1 st	5
2 nd	10	2 nd	15	2 nd	20
3rd	20	3rd	30	3rd	40
4th	30	4th	45	4 th	60
5th	40	5 th	60	5 th	70
6 th	60	6 th	75	6 th	80
7 th	80	7th	90	7th	90
8 th	100	8 th	100	8 th	100

Note - In case derived numbers are in fraction, the same shall be rounded off to the nearest whole number and 0.5 shall be rounded off to next higher whole number.

- Any failure on the part of the entity in complying with the milestones prescribed in the work programme shall lead to consequences as specified under regulation 16.
- 5. The entity shall design and install an optimal size of the infrastructure in terms of pipelines of various types including steel belting of the authorised area, online compressors of adequate capacity for compressing of natural gas into CNG, allied equipment and facilities in the CGD network depending upon the potential demand for natural gas. The infrastructure in the CGD network should be adequate to maintain uninterrupted flow of natural gas in the pipelines and be also able to maintain supplies at adequate pressure to online CNG stations.
- 6. The entity shall maintain an uninterrupted supply of natural gas to all categories of customers in the CGD network. In the event of any disruption in the supply of natural gas in the CGD Network, first priority shall be accorded to restoration of supplies to domestic PNG customers. In case of disruption of supply to domestic PNG customers for more than twelve hours, the entity shall compensate the domestic customer on the following manner, namely: -
 - (a) the normative volume of natural gas consumption for the first domestic PNG connection for cooking requirements based on last three months weighted average consumption per day to be applied for each day's disruption and multiplied by ten;

QUADRAGE

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अपिन्य कुमार
ARVIND KUMAR
अवप शहरहकार
Additional Advisor
(द्रोतिसम और प्राकृतिक मेरा विभियानक चोर्ड
प्रावध्या & Natural Cas Republicy Board
प्रथम ताल पन्ट हे के चेन्य 1st Floor, World Trade Centre
नायर शेज, नई दिल्ली - 110001
Dabar Road, New Dalbi-110001

- (b) normative value of natural gas consumption shall be based on last three months' weighted average billing price of natural gas for supplies to the first domestic PNG connection for cooking requirements; and
- (c) the value of compensation shall be equal to normative volume of natural gas consumption as per clause (a) above multiplied by normative value as per clause (b) and shall be adjusted by allowing a credit to the domestic PNG Customer in the next billing cycle or in the next pre-paid smart card in case of smart card metering.

In case the disruption of supplies is attributed to any fault of the domestic PNG customer, no compensation shall be payable by the entity.

- The entity is allowed an exclusivity period under the Petroleum and Natural Gas Regulatory Board (Exclusivity for City or Local Natural Gas Distribution Networks) Regulations, 2008, in respect of the following, namely: -
 - (a) 300 months from the date of issue of this communication for laying, building and expansion of the CGD network; and
 - (b) 96 months from the date of issue of this communication in terms of an exemption from the purview of common carrier or contract carrier for the CGD network:

Provided that the entity meets the obligations in line with the Petroleum and Natural Gas Regulatory Board (Exclusivity for City or Local Natural Gas Distribution Networks) Regulations, 2008:

Provided further that the period of exclusivity allowed under sub-clause (a) or sub-clause (b) may be terminated before the expiry of the period mentioned above in line with the provisions under Petroleum and Natural Gas Regulatory Board (Exclusivity for City or Local Natural Gas Distribution Networks) Regulations, 2008.

- 8. The authorised entity shall be required to take prior approval from the Board for creation of any lien, charge or hypothecation of the CGD network to secure finances for the project and furnish details of utilisation of funds. And, in case of raising funds from any financial institution or bank, the entity will be required to only inform the Board of the sanction of the funds within a period of seven days.
- The entity shall submit a detailed and clear financial closure report to the Board within a period of two hundred and seventy days from the date of authorisation issued by the Board under regulation 10.

ARVIND KUMAR
ante समादकार
Additional Advisor
Icilarin और अकृतिक ग्रेस मिनियानक ग्रेडं
'erroleum & Natural Gas Regustory Board
अरम प्रेस्त, पर्वे द्वित के स्ट्रिस वास्त्र सेन्द्र, पर्वे द्वित होता है। Babar Road, New Dalli-110001

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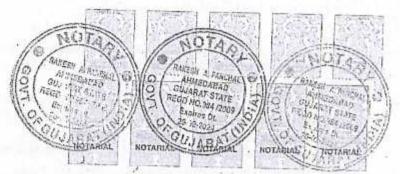
10. The entity shall publish on its website the transportation rate for CGD and transportation rate for CNG in the authorised area as per the following table namely: -

Serial Number	Description		
1	Transportation rate for CGD - in rupees per million British Thermal Unit (Rs./MMBTU) for the first contract year		
2	Transportation rate for CNG - in rupees per kilogram (Rs. /kg) for the first contract year	2	

Note - Annual escalation shall be considered from the second contract year and onwards based on the "Wholesale Price Index (WPI) Data (2011-12 = 100)" for "All Group / Commodity", as normally available on the website of the Office of the Economic Adviser, Government of India, Ministry of Commerce and Industry, Department of Industrial Policy and Promotion (DIPP) on the link "http://eaindustry.nic.in/home.asp."

- 11. The entity shall publish the applicable retail selling price of PNG for all categories of customers and also for the purpose of invoicing in Rs. / MMBTU.
- The entity shall publish and display the retail selling price of natural gas for the purpose of invoicing to CNG customers in Rs. / Kg at all-natural gas dispensing stations.
- 13. The furnishing of performance bond of Rs. 330 Million is a guarantee for timely commissioning of the project as per the prescribed work programme in the bid and for meeting the service obligations during the operating phase of the project.
- 14. The entity shall comply with the applicable provisions under the Petroleum and Natural Gas Regulatory Board (Authorising Entities to Lay, Build, Operate or Expand City or Local Natural Gas Distribution Networks) Regulations, 2008, the Petroleum and Natural Gas Regulatory Board (Exclusivity for City or Local Natural Gas Distribution Networks) Regulations, 2008, relevant regulations for technical standards and specifications, including safety standards, any other regulations as may be applicable and the provisions of the Act.
- 15. In case the authorisation of the entity is terminated, the Board may assign the rights and obligations of the entity to any agency or another entity on such terms and conditions, as it may deem fit. Further, the entity may be required, as per the directions of the Board, to continue the operations of the CGD network at the same level till another agency or entity appointed by the Board takes over the full control of the CGD network.

अरविन्द कुमार ARVIND KUMAR अपर सलाउनार Additional Adviser गेद्रीसिया और प्राकृतिक ग्रेश गिनियानस बोर्ड गेट्रालियान के Nature Gas Regulatory Board प्रथम तथा मन्द्री देश शेन्दर 1st Floor, World Trade Contro भागर शेंद्र, गंदे हिल्ली - 1100001 Babor Road, New Dolln-110001 OUDDAMENTS AND THE STATE OF THE



SPECIAL POWER OF ATTORNEY

Adani Total Gas Limited is a company incorporated as per provisions of the companies Act, 1956 and having its Registered office at "Adani Corporate House*, Shantigram, Nr. Valshnodevi Circle, S G Highway, Ahmedabad -382421, (hereinafter referred to as 'Company' or 'ATGL')

WHEREAS various agreements are to be executed and various permissions are to be obtained from various Government/semi government/local authorities and departments for and behalf of the Company from time to

AND WHEREAS Adani Total Gas Limited is desirous to appoint official of the Company as its attorney to act on behalf of the Company in the manner and to the extent hereafter appearing.

Now these presents witness that the Company doth hereby irrevocably constitute, nominate, appoint and authorize Mr. Rajesh Prabhu son of Shripad Prabhu, Senior Vice President of the Company, age Adult (hereinafter called "Attorney") to be true and lawful attorney of the Company to do and perform the following acts and things for all matters/work related to Geographical Area authorized to ATGL in the State of Karnataka, Odisha and Tamilnadu.

- To sign and execute all agreements including Lease/s, 1) License/s, Dealership/s, MOU/s, Declaration/s, Side Letter/s. Affidavit/s, Undertakings, Notices;
- To purchase and pay for Stamp papers/stamp Duty for 2) franking as may be required to execute agreements as referred in (1) above.
- 3) To appear before appropriate authority including Registrar, Sub-registrar and sign, verify and submit any application, affidavit, undertaking and/or any other documents for the registration of agreements as referred in (1) above as and when required.
 - To sign & make all applications and correspondences for seeking all permissions from (i) various Authorities whether Central or State or local village authorities including but not limited to Municipal Authorities, Police , Magistrate, Petroleum and Natural Gas Regulatory Board (PNGRB), Retroleum and Explosive Safety Organisation (PESO), Public Works Department(PWD), National Highway Authority of India (MHAI), forest, Railways, and/or (ii) Govt. departments including irrigation, fire, health, pollution, custom, excise and/or (iii) any Company, Association, Partnership Firm, Society or any other person as may be required from time to

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To do all incidentals, ancillary, related, connected acts and 5) deeds as may be required.

THAT Company hereby agrees and undertakes to ratify and confirm all acts. deeds and things lawfully done by our said Attorney as acts, deeds and things done by Company.

This Special Power of Attorney shall remain valid up to 31 March, 2023 from the date of execution.

IN WITNESS WHERE OF THE COMPNAY HAS EXECUTED THIS SPECIAL POWER OF ATTORNEY ON EP day of 2022

For Adani Total Gas Limited

Suresh P Manglani, Chief Executive Officer

Accepted By:

Rajesh Prabhu



Witness:

(1) Name of Witness : Viven D' Jhaveti

Signature

Date

Pratik Madrecha (2) Name of Witness:

Signature

Date

SIGNED BEFORE ME

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R. A. PANCHAL HOTARY GOVT. OF GUJARAT

2 4 SEP 2022







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RAKESM A. PAHCES

AMMEDABAD GUJARAT STATE DEGD NO.984 (2009)

Expires DL