

Conquering Newer Horizons

অইল নিউজ

ऑयल न्यूज़



Volume 39 No. 4, July - Oct 2011



Oil India Limited was conferred with the award of "Company of the year" among all Navratna companies at the PSE Excellence Award ceremony at New Delhi. The Award was given away to Shri N M Borah, CMD, OIL by Shri Bhaskar Chatterjee, Secretary, DPE, Government of India. The Award was given to the Company for its all round achievements in the areas of physical and financial performance, CSR, HSE and sustainability parameters.



Volume 39 No. 4 July - Oct 2011

**COVER:** 

OIL - Company of the year

#### **PREVIEW**

Spotlight	4-5
Event	6-9
Celebrations	10
Essay	11-13
Training & Development	14
Sphere News	15
Accolades	16
Assamese Section	17-24
Hindi Section	25-31







#### STOP PRESS

## \*EðföVÜÐÝÊ\_`Òù;t\*\_

%+\_ +%1°ç Y>>)°c\_> éaāTö-X<10ba¶ijui>> [guù Fç+ UEō; %XXî aeGYTö YƏTƏ\i; ]¢X¾T@[ý\Ý [ŷ\*Nþ QiO \fiYX c;eL\*»E@> ]c;eYD°;\$T0°%+\_ +\*\frac{\partial}{\circ} \times\_\ `Òict× »Xã[WX Eõ»äK÷



Homage to a Legend

Oil India Limited pays homage to Late Dr. Bhupen Hazarika, a musical genius & humanist who had a very close association with Oilindians.

#### **EDITORIAL**

#### Dear Reader,

The most talked about event in the past few months was the 52nd Annual General Meeting of OIL, which was held at Duliajan. The splendid all round performance of the Company, which was well chronicled in the comprehensive address of Shri N M Borah, CMD, OIL not only brought about a huge cheer from the large numbers of shareholders present in the meeting but a sense of accomplishment and legitimate pride prevailed in the minds of every Oilindian. And when the CMD also informed that OIL has been honoured as the "Company of the Year" by the Indian Chamber of Commerce and the Department of Public Enterprises, it was a cause for celebration across the Company. OIL News has made an effort to capture these wonderful moments for posterity.

But just as this edition of OIL News was about to be printed, the sad news of the demise of Dr. Bhupen Hazarika saddened the hearts of the people of Assam as well as Oilindians with whom the legend had a very close association. In our humble way, OIL News pays homage to our beloved Bhupenda, the great humanist and musical genius who with his god-gifted talent inspired the young and the old beyond the human boundaries of cast, creed and religion.

- Tridiv Hazarika

#### Address for communication

PR Department

Oil India Limited, Duliajan

Dist. Dibrugarh (Assam) Pin - 786 602 Tel: (0374) 2808495, Fax: (0374) 2800427

email: tridivhazarika@oilindia.in

The views expressed by the authors in the articles are their own and the Company does not subscribe or take responsibility for any part or whole of the views.

- Editor, OIL News

#### **Editorial Family**

Advisor : Pranjit Deka Editor : Tridiv Hazarika

Associate Editors : Dr. V. M. Bareja (Hindi)

Beena Purkayastha (Assamese)

: Jayant Bormudoi Assistant Editor

OIL News is the bimonthly trilingual house journal of OIL India Limited brought out by Public Relations & Corporate Communication Department. Company related news / features may be reproduced only with the permission of the Editor.

Design & Produced by Saikia Printers, Duliajan

#### From Resident Chief Executive

[Tulisian] bwing is the speech delivered by RCE during the Independence Day Celebration at Nehru Maidan,

#### Dear Oilindian,

Citizens of Duliajan, personnel from CISF and Police, scouts and guides, ladies and gentlemen, students, children, members of the media let me first extend my greetings for Independence Day on this 65th Year of Independence of our great nation.

At the outset, let us all pay our tributes to the founding fathers of our nation, the brave men and women and all those who sacrificed their lives for our present and the future. It is due to these sacrifices of so many of our brethren that today India has been able to make her presence felt at the world stage on diverse fields.

As a national Oil Company, it has been Oil India Limited's endeavour to serve the country's growing energy needs by putting all our resources to the purpose of augmenting our production and discovering newer hydrocarbon reserves both within the country and in overseas.

In this regard, I am very pleased to inform you that in the first quarter of the current financial year 2011-12, the Company has achieved 20% increase in crude oil and 16% increase in natural gas production. This

remarkable increase in our production has resulted in 46.91% increase in net profit compared to the first quarter of last financial year.

Oil management is most indebted to the hard work and commitment of every Oilindian and especially the support and goodwill of the public organizations, the state government, District Administration, security agencies and the people of our operational areas. It is a collective effort which has enabled OIL to surpass all previous records and deliver such a wonderful result both operational as well as financial.

While, we have all the reasons to be proud of our success, we must also take, greater responsibilities to ensure that we keep up the momentum and achieve our ambitious targets of producing 4.0 MMT crude oil by end November and 10 MMSCMD of Natural Gas by December 2012.

I am confident that with the concerted efforts of each and every Oilindian and the stakeholders, and support of all the people living in our operational area, OIL shall surely surpass these targets and register new records of all round excellence.

Uninterrupted supply of crude oil to the refineries in Assam by OIL is not only vital for these refineries but the financial health of the state since the Oil companies together account for a substantial portion of the state's revenue generation. Similarly, the uninterrupted supply of gas is extremely important for industrial growth of the region and any disruption will adversely impact hundreds of tea gardens and all major industries such as APL, BVFCL, NEEPCO, NTPC etc. and forthcoming prestigious Gas Cracker Project.

As a company committed to the all round development of the state and the people in and around our operational areas, we are indebted to the stakeholders, especially the resident of our operational areas for their continuous support and love. In our humble way, we have always tried our best to address the needs of the society where we operate. In fact, this year, OIL has signed an MoU with the Ministry of Petroleum and Natural Gas to take up a few significant CSR initiatives, namely, reduction of Infant Mortality Rate (IMR), promotion of computer and adult literacy in OIL's operational areas and in continuation of the ongoing Project Rupantar, support an additional 250 Self Help and Joint Liability Groups in and around our operational areas within this financial year.

These are very well thought-out and planned initiatives with a long term vision, which will surely bring about tangible change, especially in creating self employment opportunities, skill development and visible improvement in reducing infant mortality rate.

Environment management, protection, conservation and safety has always been a priority for OIL. While, this is a challenging area especially for an extractive industry like OIL, we are happy to share with you that quite a few reputed national and international agencies in the recent past have bestowed upon OIL awards like the Golden Peacock Special Commendation for environmental excellence and Greentech safety gold award for commendable efforts in the area of industrial safety.

In my last public address, I had made a mention about OIL's commitment and concern for the success of the much awaited Assam Gas Cracker dream Project i.e. BCPL at Lepetkata. I am happy to inform you that we have already started supply of natural gas to NRL as per commitment so that the Naptha used by NRL could be made available to the gas cracker project. I once again earnestly appeal to the public at large to extend all cooperation to OIL, BCPL and all other agencies connected with this ambitious project so that the project can be implemented at the earliest.

While working together for the mutual benefit of Industry and society, it is possible that there may be many aspirations and also differences of opinions. I have always highlighted this aspect that while we appreciate people's expectations from OIL, but as a Government Company, OIL has its own limitation and shall have to work within the purview of the broad guidelines and norms. However, I am confident that as always any issues, however complex that it may appear can always be resolved amicably through the time tested process of dialogue and mutual trust and understanding and we are committed to the same.

OIL cannot take the full responsibility of the State Govt. such as employment, river erosion, all roads & buildings, health and education. So expecting OIL to fulfill all the aspirations will be a far cry. However, we do our bit wherever possible. I urge upon all the organization to appreciate the same and appeal to them to approach the Govt. agencies for such activities and not bank on OIL totally and resort to stoppages of OIL's activities on non-fulfillment of such demands.

Once again, I would like to make a sincere and ardent appeal from this podium on this auspicious day to all the public organizations to appreciate the fact that OIL's performance does not only impact OIL's productivity but the productivity of most of the industries in this region including all refineries and the economy of Assam at large. We are committed to our vision of achieving inclusive growth where OIL's growth will always imply the growth of the people, the region and the state at large. For this, we must all work together and create an environment conducive for OIL to achieve higher growth.

I must take this opportunity to thank the Government of Assam, the District administrations, the security agencies, Media personnel and the people at large for their whole hearted support and goodwill, which have helped OIL to overcome various challenges and achieve visible success on diverse fronts. Let's all work and grow together.

On this auspicious day, I pray for the good health and prosperity of every citizen of our country and once again thank all our stakeholders for the love and support towards OIL.

Jai Hind!

(N K Agarwal)
Resident Chief Executive





"We cannot all be great, but we can always attach ourselves to something that is great."

- S. E. Fosdick

Spotlight

# Oil India Limited holds 52nd Annual General Meeting at Duliajan



Shri N M Borah, CMD, OIL addressing the shareholders during the 52<sup>nd</sup> AGM

il India Limited (OIL) held its 52<sup>nd</sup> Annual General Meeting (AGM) at Duliajan on 24<sup>th</sup> September, 2011. Chairman and Managing Director (CMD) of OIL, Shri N M Borah, addressing the shareholders during the AGM shared his thoughts on various aspects about OIL's excellent all-round performance in the bygone fiscal despite being confronted with myriad challenges faced by the industry and a very volatile crude oil market.

Addressing a large turnout of shareholders, Shri N M Borah, CMD, OIL, in the opening remarks of his address extended his personal gratitude to all the members of the extended OIL family, present during the meeting.

Breaking all past records, OIL in the year 2010-11 achieved highest ever annual production of Crude oil and Condensate in the history of the Company at 3.62 MMT. More importantly, he said that it has been possible to maintain the growth rate in production over the last four years. The terminal crude oil production rate as on 31st March 2011 was 3.80 MTPA. Maintaining this growth trend, it has been possible to reach the current production rate of around 3.93 MTPA.

Production of Natural Gas and LPG during the year was 2352.71 MMSCM and 45010 Tonnes respectively. The Company's present gas production potential is around 7.93 MMSCUMD of which 7.00 MMSCUMD is from N.E Region and 0.93 MMSCUMD is from the fields in Rajasthan. Actions are in hand for furtherance of gas production potential and creation of additional infrastructure.

Shri Borah also informed the shareholders about OIL's initiatives in LNG Project, entry in CBM and Shale Gas study. He also reiterated that success in the exploration ventures under NELP and overseas will augment the production potential further. Down-stream integration, City-

Gas distribution, new Pipeline business and entry into the non-conventional energy sector are new horizons to be conquered as the opportunities arise.

As of March 31, 2011, the Company's 2P reserves stands at approximately 1 billion barrels of Oil + OEG. The Company made six new oil and gas discoveries during the year in the State of Assam. These discoveries have opened up new avenues for further exploration and development activities.

With such excellent performance on the crude oil and gas production / sales front, Oil India earned Profit after tax of `2887.73 cores compared to `2610.52 crore last year and this is the highest ever. This achievement is in spite of having to provide subsidy discounts to the tune of `3293 crore to Oil Marketing Companies to compensate for their under recoveries in line with Government policy. Improved financial performance has helped the Company increase its net worth to `15602 crores as against `13745 crore during the previous fiscal.

OIL paid an interim dividend @ 180%, based on the provisional financial trend of the Company. The Board of Directors have recommended a final dividend @ 195% on the paid up capital making the total dividend 375% (last year 340%) for the year, subject to approval of shareholders.

The Company also made substantial contribution both to the State and Central exchequer in terms of Cess, Royalty, Sales Tax etc. The contribution to the State Exchequer during the year was Rs 1515.46 crore and that to the Central Government was Rs 3136.07 crore. Shri Borah also informed that it is a matter of great pride that OIL's audited annual accounts have "Nil" comments from the Comptroller and Auditor General of India for the seventh year in succession.

Highlighting OIL's commitment towards promoting a cleaner environment, a richer society and a better quality of life for all stakeholders, Shri Borah with a touch of legitimate pride shared the good news of OIL being conferred with a number of prestigious awards at the local, national as well as international platforms. Oil India Limited was accorded the "360 Degree Growth" award by Dalal Street, the Financial and Investment Journal; First Prize for Oil Industry Safety Award in Oil & Gas Assets (Onshore) Category; Golden Peacock Global Award for CSR for the year 2010 by World Council for Corporate Governance in Lisbon, Portugal, besides others.

Oil India Limited was also conferred with the award of "Company of the year" among all Navratna and Miniratna companies at the PSE Excellence Award ceremony at



New Delhi. The award was instituted by Indian Chamber of Commerce supported by the Department of Public Enterprise, Government of India. This is the most prestigious award given to the Company for its all round achievements in the areas of physical and financial performance, CSR, HSE and sustainability parameters. The award was given away by the Secretary, Department of Public Enterprise, Government of India, at a glittering ceremony in New Delhi which was attended by top PSE officials and Government dignitaries. The jury who selected the award winners were eminent personalities from the industry, Government bodies and public servants. Chairman and Managing Director, Oil India Limited, Shri N.M.Borah, while accepting the award on behalf of the Company, dedicated the same to all the OilIndians for their commitment and hard work.

Talking of cleaner environmental issues, Shri Borah informed that OIL has anticipated the implications of climate change impacts and, therefore, has taken steps to collaborate with stakeholders, and make environmental sustainability one of the Company's business principles.

OIL has already completed the mapping of its carbon footprint and GHG emission level in various spheres of its operations. The findings of the study will help OIL in taking proactive measures to cut down its carbon footprint.

Being the second largest national oil and gas Company in India in terms of total proved plus probable oil and natural gas reserves and production for the year 2010-11, OIL under the first eight rounds of NELP bidding had acquired thirty blocks, either alone or in partnership with other national or international companies with operatorship in twelve blocks. In the recently concluded NELP IX round OIL has successfully competed for ten more strategically located blocks with operatorship in three of them and joint operatorship in two deepwater blocks. Formal award of these ten blocks is expected shortly. With north-east as its core area of operation, Oil India, now, has a pan-India presence with selected global footprints. The Company has overseas presence in nine countries, with acreage of 38605 Sq kms.

Shri Borah also stated that the Company's stock has been performing well in the markets and Surveys done by Economic Times and Dalal Street Investment Journal adjudged OIL's stock as one of the best performing stocks with least financial risks. All the leading Financial Analysts corroborated this recognition through Investor Reports at various points of time.

Shri Borah in his address also emphasized the fact that Oil India has a "great team of employees, who, through their competence and commitment, are giving shape to the dreams and building a new future for OIL". The Company's Human Resources philosophy is to establish, build and retain a strong performance and competency driven culture with greater sense of accountability and responsibility.



Glimpse of public gathering at the venue & a stakeholder seeking information

Shri Borah reiterating OIL's continued focus on community development initiatives and environment friendly activities mentioned that these initiatives have been admired nationally and internationally. He stated that, "I firmly believe that the purpose of any business can not be driven by profit alone. Each one of us has to commit to building a better world." With this perspective, OIL's social welfare and community development initiatives focus on the key areas of education, healthcare and the overall development of basic infrastructure in and around its operational areas. Presently, over 1400 villages in Assam and Arunachal Pradesh have been covered under the welfare schemes.

Under various CSR schemes OIL continues to provide assistance to educational institutions for buildings, libraries, scholarships to meritorious students, sponsoring sportspersons and tournaments etc. Most noteworthy were aid for setting up Centre of Management Studies (CMS) at the Dibrugarh University, aid for setting up an IT Centre at Duliajan College and sponsorship of Educational and Career Fair. OIL has also approved construction of an Auditorium in the OIL town of Duliajan, a long standing demand of the residents, and actions are at hand to start work at the earliest.

Shri Borah informed of the recent initiative in the field of education named "Uttkarsh Superb 30'. Under this scheme, OIL fully sponsors 30 students of the region, from economically challenged background, for one year to undergo rigorous coaching at Guwahati for taking competitive examinations for entrance to eminent Engineering establishments. In the first year, 25 students got into different Engineering colleges of the country including IIT / NIT / ISRO. In view of such good performance, this year, the Company has opened another centre at Jorhat, in addition to the Guwahati centre, where 30 more students are being coached.

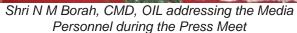
Sharing his thoughts on corporate governance, the CMD mentioned that the Company's commitment to exemplary corporate governance practices is best reflected in the fact that OIL has been obtaining clean audit reports for several years on a continuous basis. Moreover, OIL's Company's Corporate Governance practices meet the stipulations of Regulators including the DPE Guidelines.



#### **AGM PRESS MEET**

A Press Meet was organized at MTDC auditorium on 24th September, 2011, wherein the media personnel had an interactive session with Shri N M Borah, CMD, OIL. Functional Directors and Head of Fields.







Interactive session with Media Personnel during the Press Meet

## **Tripartite Safety Committee Meeting**







A Tripartite Safety Committee Meeting was organised on 29<sup>th</sup> June, 2011 at Duliajan in the Main Conference Room, where officials from Mines Safety Directorate, Eastern Region, Management of OIL and President, Secretary & other office bearers of IOWU participated.

Shri U. Saha, Dy. Director General of Mines Safety, Eastern Region, Sitarampur along with Shri D. K. Sahu, Director Mines Safety, Guwahati Region was present in the meeting presided by Shri N. K. Agarwal, Resident Chief Executive of OIL.

A presentation on the status of implementation of recommendations of 10<sup>th</sup> Conference on Safety in mines was made by Shri. C. Bose, Head (S&E) which had major emphasis on Contractor Safety.

Shri U. Saha, DDGMS mentioned that one of the objectives of Tripartite Meetings is to address long pending HSE issues and to ensure participation of employees in Safety Management System.

#### INDEPENDENCE DAY CELEBRATION

Independence Day was celebrated at Field Headquarter in a befitting manner at Nehru Maidan, Duliajan. Shri N K Agarwal, Resident Chief Executive who was the Chief Guest of the celebration, hoisted the National Flag followed by National Anthem, Guard of Honour and March Past.

Independence day was also celebrated at Moran in a befitting manner. A short colourful programme marked the occasion. A Friendly exhibition Football Match was also played between OIL Moran & CISF OIL Unit Moran at OIL Sports Ground, Moran.

As part of the celebration, essay and drawing competition were orgainsed amongst the school children and sweets were distributed in schools.





## **KALPALOK**

#### The Virtual Reality Centre (VRC) unveiled at Duliajan



Shri N.M.Borah, CMD, OIL inaugurating the VRC, also seen Shri B. N. Talukdar, Director (E&D) & Shri T. K. Ananth Kumar, Director (Finance)

il India Limited (OIL) has set up a new state-ofthe-art Virtual Reality (VR) Centre, named "Kalpalok", in its Field headquarter at Duliajan, Assam.

Shri N. M. Borah, Chairman and Managing Director of OIL officially inaugurated the VR Centre on 23<sup>rd</sup> September, 2011 in presence of Shri T. K. Ananth Kumar, Director (Finance), Shri B. N. Talukdar, Director (Exploration & Development), Shri N. K. Bharali, Director (Human Resource & Business Development), Shri S. Rath, Director (Operations), Shri G. Amin, Independent Director, Shri N. K. Agarwal, Resident Chief Executive, Shri K. K. Nath, Executive Director (Exploration & Development), Dr. U. Barua, Executive Director (Medical Services), Shri B. Deka, Group General Manager (Production) and other senior officials of the Company.

"Virtual Reality" refers to computer generated environment that look and feel as if they are real. At the VR Centre, hi-end computers create realistic, interactive environment where multi-disciplinary teams can visualize and interact with the subsurface data in a realistic three dimensional work frame and analyze the hydrocarbon prospects in a particular area.

The Virtual Reality Centre, "Kalpalok" (meaning virtual world) is also connected with "Decision Centre" in OIL's Corporate Office at NOIDA through video-conferencing

and desk top sharing facility for effective collaboration and communication between geo-scientists at Fields Headquarter, Duliajan and E&D Team at NOIDA. This will enable effective and faster decision-making, planning and co-ordination as well as reduce exploration and development downtime in addition to risk mitigation.

In his inaugural address Shri Borah expressed his happiness over completion of virtual reality centre, which was a long cherished dream of Company's geo-scientists and engineers. Shri Borah mentioned that as oil finding has become more challenging the use of advanced technology, especially in the present day context is of paramount importance. Hence, the need for "more technology per barrel of oil" has become imperative. Shri Borah praised the key role played by Shri B. N. Talukdar, Director (Exploration & Development) in setting up the 'state-of-the-art' centre.

Shri B. N. Talukdar, Director (Exploration & Development) addressed the gathering and lauded the role played by the muti-disciplinary team on successful implementation of the VR Centre. He also suggested to bring in more of such advanced technologies in the near future in drilling and production activities of the Company.

Shri S Rath, Director (Operations) recalled few key events during the process of setting-up the VR Centre. He applauded the Company's geo-scientists for putting the technology to use for OIL's exploration projects.



Shri N.M.Borah, CMD, OIL addressing the gathering, also seen Shri K. K. Nath, ED (E&D), Shri N. K. Bharali, Director(HR&BD) & Shri S. Rath, Director (O)



## **PUBLIC HEARING**

il India Limited being a people's company is committed to its people and believes in giving full opportunity to express views, opinion and inspect records. The Company considers maintaining transparency by giving opportunity to the people to scrutinize environment or socio-economic impact of any new project. For smooth installation of the new projects without hampering the environment or the people, the Company at regular times conducts Public Hearing to understand the opinion of the key public residing in the areas, where the new projects are to be installed. Under the guidelines from the Ministry of Forest and Environment, it is mandatory to conduct Public hearing by any Company before installing new projects in a given area.



Shri B. Deka, GGM (Production) speaking at a Public hearing

With its epanding growth, Oil India this year organised 9 public hearings- 5 in Assam and 4 in Mizoram. On 8th of July 2011, Public hearing was held at Baghjan regarding laying of three pipelines to transport gas to the upcoming project with BCPL through Baghjan and neighbouring areas. The Public Hearing on 7th of July at Naoholia was held to inform people about setting up of proposed Secondary Tank Farm (STF) at Tengakhat, Naharkatia and Jorajan area. In the month of August, three Public Hearings were held i.e. on 23rd August at Ushapur, 25th August at Kothalani and 26th August at Borhapjan. The Hearings were held for environmental clearance for Gas filed expansion project.

The mechanism of Public Hearing is an important tool as it provides an opportunity of being heard. Public Hearing is a meeting of a house committee or subcommittee during which public problems may be heard and formal action may be taken on any measure or matter.

State statues require that public hearings be held regarding the application for a variance or a subdivision approval regarding site plan application and draft environmental impact statements may be required as a matter of local practice.

It is a formal meeting designed to provide the public with the fullest opportunity to express support of or opposition to a project in an open forum where the oral interaction are recorded. In a public hearing issues relating to environment, related to displacement, eviction of persons or families and their rehabilitation. It is a way of giving powers to the public to ask any questions in effect making the government or the authority answerable in such hearings.

Such hearings conducted by OIL with support from PCB are especially useful for people living in the rural areas where people can avail the opportunity of being heard through the mechanism of public hearing, which definitely provides for speedy justice and instant resolution of problems. It gives the people the right to participate.

The Public Hearing is arranged in a systematic, time bound and transparent manner ensuring widest possible public participation at the project sites (s) or in its close proximity District-wise, by the concerned State Pollution Control Board (SPCB) or the Union Territory Pollution Control Committee (UTPCC).

The applicant makes a request through a simple letter to the Member Secretary of the SPCB or Union Territory Pollution Control Committee, in whose jurisdiction the project is located, to arrange the public hearing within the prescribed statutory period. In case the project site is covering more than one District or State or Union Territory, the public hearing is mandated in each District, State or Union Territory in which the project is located and the application shall make separate requests to each concerned SPCB or UTPCC for holding the public hearing as per this procedure.

The applicant arranges to forward copies of the draft EIA reporting along with the Summary EIA report to the District Magistrate/District Collector/Deputy commissioner/s, Zilla Parishad or Municipal Corporation or Panchayats Union, District Industries Office, Urban Local Bodies (ULBS) / PRIs Concerned /Development authorities, Concerned Regional Office of the Ministry of Environment and Forests or offices.

The authorities arrange to widely publicize it within their respective jurisdictions requesting the interested persons to send their comments to the concerned regulatory authorities.

The Member-Secretary of the concerned SPCB finalizes



A stakeholder seeking some clarifications on the project



the date, time and exact venue for the conduct of public hearing within 7 (seven) days of the date of receipt of the draft Environment Impact Assessment report from the project proponent, and advertise the same in one major National Daily and one Regional vernacular Daily /Official State Language. A minimum notice period of 30 (thirty) days is provided to the public for furnishing their responses.

The District Magistrate /District collector/Deputy commissioner or his or her representative not below the rank of an Additional District Magistrate assisted by a representative of SPCB or UTPCC, supervises and presides over the entire public hearing process.

The SPCB or UTPCC shall arrange to video film the entire proceedings. A copy of the videotape or a CD shall be enclosed with the public hearing proceedings while forwarding it to the Regulatory Authority concerned. A representative of the applicant shall initiate the proceedings with a presentation on the project and the Summary of EIA report.

Persons present at the venue are granted the opportunity to seek information or clarifications on the project from the applicant. The summary of the public hearing proceedings accurately reflecting all the views and concerns expressed shall be recorded by the representative of the SPCB and read over to the audience at the end of the proceedings explaining the contents in the local/vernacular language and the agreed minutes shall be signed by the District Magistrate /District collector/Deputy commissioner or his or her representative on the same day and forwarded to the SPCB/UTPCC concerned.

The proceedings of the public hearing is conspicuously

displayed at the office of the Panchyats within whose jurisdiction the project is located, office of the concerned Zilla Parishad, District Magistrate / District collector/Deputy commissioner, and the SPCB or UTPCC. The SPCB or UTPCC shall also display the proceedings on its website for general information.

The public hearing shall be completed within a period of forty five days from date of receipt of the request letter from the applicant. Thereafter the SPCB or UTPCC concerned shall send the public hearing proceedings to the concerned regulatory authority within eight days of the completion of the public hearing. Simultaneously, a copy will also be provided to the project proponent. The applicant may also directly forward a copy of the approved public hearing proceedings to the regulatory authority concerned along with the final Environmental Impact Assessment report or supplementary report to the draft EIA report prepared after the public hearing and public consultations incorporating the concerns expressed in the public hearing along with action plan and financial allocation, item-wise, to address those concerns.

For a company like OIL, engaged in exploration, production and transportation of crude oil and natural gas faces challenges to widen its areas of operation and at the same time be environment friendly and socially responsible, Public Hearing is becoming one of the most important and effective means of fair dealing in India. The importance of the public hearing can be traced as one of the means for maintaining transparency in the contemporary society where it helps in making people believe in the delivery of justice in the country.

## **Eco Tourism Project** SASONI MERBEEL

Govt. of Assam inaugurated Sasoni Merbeel Eco Tourism "This is the first community driven project in north eastern Project on 3rd July at Sasoni and also announced sanction region with exotic components like fresh water aquarium, of 3 crores by Govt. of Assam out of the total of 5 crores. ropeway, home stay, spa etc." The occasion was graced by dignitaries like renowned intellectual and noted litterateur Shri Homen Borgohain, Shri Chandan Brahma, Cabinet Minister, Transport and Tourism WPT & BC (only BTAD area), Ms. Pranati Phukan, Minister of Handloom & Textile, Sericulture, Cultural Affairs, Shri K. K. Nath Executive Director (Ops), OIL, Duliajan, Anuraag Singh, DFO, Manalisha Goswami Director, Assam Tourism and innumerable local people of Sasoni. Shri Chandan Brahma laid the foundation stone for Sasoni Merbeel Eco Tourism Project, the first community based eco tourism project in the state.

On the auspicious occasion a tourist cottage was also inaugurated. Ms. Pranati Phukan, Minster of Handloom & Textile, Sericulture, Cultural Affairs, commended OIL for taking such noble initiatives and requested to invest more in the eco tourism sector of the region. Shri K. K. Nath, Executive Director (Ops), OIL Duliajan also assured that, while OIL has extended financial assitance in preparing the DPR, it will extend further help to the project and also promote Naharkatiya Oil Rig as a world heritage site.

In his speech, Shri Homen Borgohain complemented and

appealed the government for investing more money in such projects. He also complemented Manimanik Gogoi (President, Merbeel Eco Tourism Development Committee) and his team for pioneering such project. Shri Chandan Brahma, Minister of Tourism and Transport, Mr. Shyamkanu Mahanta(Project expert) in his speech said





# Calebrations

## A 25 Years Journey of Disang Ladies Club

isang Ladies Club, the vibrant sociocultural unit of around 100 enterprising women of the OlL fraternity was established 25 years ago. It was in the year 1986, when a handful of ladies got together to discuss & celebrate the spirit of woman hood. In this positive note the Disang Ladies Club

progressed step by step and today it is a major sociocultural hub of the women fraternity in OIL's Corporate office.

It is not only limited to cultural functions but over the years had taken various initiatives towards betterment of the under privileged sections of the society. Besides organizing various workshops on women related issues over the years, and visiting old age homes, orphanages, contributing during flood reliefs, cyclones, etc, the major step was taken when a trust was formally formed for the under privileged children of the society residing near the OIL Housing Complex. The name of the Trust is Ujala Charitable Trust. Today we are proud that many children from Ujala Charitable Trust, because of its dedicated teachers, who are working round the clock for the benefit of the young minds for free of cost has sent many of their students to good private schools after completing their studies in Ujala till Class 1. Presently, the school principal is Smt. Tanuja Patnaik, and the teachers are Mrs. Dipali Sarma, Mrs. Shanta Rao, Mrs Kavita Mishra, Mrs. Shubha Chatterjee, Mrs. Rosy Sharma & Mrs Manjuri Kakoti.

Close to the heels of the Project Ujala, a new Project was inaugurated a couple of years back. That was to empower the girl child. It was Project-Aastha. As the name suggests, the girls were taught in tailoring & embroidering courses. Mrs Fauzia Iqbal had single handedly spearheaded the project and is recently joined by Mrs Manisha Singh to help her in this noble endeavor. A few girls who had successfully passed out in the recent months have already started their own tailoring units and have started to supplement the income of their families.



The success of Project Aastha was realized by our President, Smt Rupshikha Borah, who dreamt of providing more similar opportunities to the young women of the under privileged sections. Keeping this in mind, she initiated a new project for the girls. It was Project Gauri. It is a beautician course, where they will

be professionally trained and will be given certificates for employment opportunities in the various spas & beauty salons in and around Delhi & NCR. The Project was formally inaugurated in the auspicious occasion of Janmashtami celebration by Chairman & Managing Director, Shri NM Borah. The lamp of learning was lighted by all the Directors of the Board & former CMD, Shri NN Gogoi & Shri BB Sharma also.

From the first day of initiation of Project Gauri, it is now most sought after course by the young girls of the neighborhood. The certificate course will be of 3 months for each batch. A professionally trained lady is hired for providing the training. Smt Kanta Barua has volunteered as the coordinator for Project Gauri.

The President, Smt Rupshikha Borah, had always taken interests in the activities of the ladies club as a whole. And under her directions many such novel programs were initiated. The Ladies Club organized the Shrawan Antakshari and made sure that most of its members join the competition to keep the spirit of competition & togetherness alive.

The Janmashtami program was also organized for the first time in Disang premises, where the famous group Dhwani gave an enthralling performance. It was out an out classical nite, which started with Bhajan & Thumri by Smt Sudarshana Deka and an in house dance performance choreographed by Smt Kanta Barua.

Today as Disang Ladies Club completes 25 glorious years, it pauses to salute its founders and promises more such delightful gatherings and social initiatives which will bring cheer & happiness to many.



President, Disang Ladies Club Smt RS Borah,felicitating Smt Vaswati Mishra of Dhwani after the Katha program during Janmashtami



Celebrating Teachers day with the students of Ujala



Visit to Bhagwat Dham, an Old Age Home in Mayur Vihar, New Delhi by the President, Secretary & Senior Advisors of Disang Ladies Club



## PROJECT PLANNING & MANAGEMENT, AN OVERVIEW



**Trideeb Saikia**, Dy. Chief Engineer Drilling



**J. P. P. Das**, Dy. Chief Engineer Production Oil

#### What is a Project?

A project is a temporary endeavor undertaken to create a unique product, service or result. The temporary nature of projects indicates a definite beginning and end. The end is reached when the project's objectives have been achieved or when the project is terminated because its objectives will not or can not be met or when the need for the project no longer exists. Temporary does not mean short in duration. Temporary does not generally apply to the product, service or result created by the project; most projects are undertaken to create a lasting outcome. Projects can also have social, economic and environmental impacts that far outlast the projects themselves.

Every project creates a unique product, service or result. Although repetitive elements may be present in some project deliverables, this repetition

does not change the fundamental uniqueness of the project work.

An ongoing work effort is generally a repetitive process because it follows an organization's existing procedures. In contrast, because of the unique nature of projects, there may be uncertainties about the products, services or results that the project creates. Project tasks can be new to a project team which necessitates more dedicated planning than other routine work. A project can involve a single person, a single organizational unit or multiple organizational units.

#### What is Project Management?

Project Management is the application of knowledge, skills, tools and techniques to project activities to meet the project requirements. Project management is accomplished through the appropriate application and integration of the 42 logically grouped project management processes comprising of 5 process groups. These 5 process groups are:

- Initiating process
- Planning process
- Executing process process
- Monitoring & Controlling
- Closing process

#### Managing a project typically includes:

- Identifying requirements
- Addressing the various needs, concerns and expectations of the stakeholders as the project is planned and carried out
- Balancing the competing project constraints including but not limited to:

O	Scope	0	Quality	O	Schedule
O	Budget	$\mathbf{C}$	Resources	O	Risk

The specific project will influence the constraints on which the project manager needs to focus.

The relationship among these factors is such that if any one factor changes, at least one other factor is likely to be affected. Project stakeholders may have differing ideas as to which factors are the most important creating an even greater challenge. Changing the project requirements may create additional risks. The project team must be able to assess the situation and balance the demands in order to deliver a successful project.

Because of the potential for change, the project management plan is iterative and goes through progressive elaboration throughout the project's life cycle. Progressive elaboration involves continuously improving and detailing a plan as more detailed and specific information and more accurate estimates become available. Progressive elaboration allows a project management team to manage to a greater level of detail as the project evolves.

#### **Project Management Office (PMO)**

A project management office (PMO) is an organizational body or entity assigned various responsibilities related to the centralized and coordinated management of those projects under its domain. The responsibilities of a PMO can range from providing project management support functions to actually being responsible for the direct management of a project.

The specific form, function and structure of a PMO are dependent upon the needs of the organization that it supports.

A PMO may be delegated the authority to act as an integral stakeholder and a key decision maker during the beginning of each project, to make recommendations or to terminate projects or take other actions as required to keep business objectives consistent. In addition, the PMO may be involved in the selection, management and deployment of shared or dedicated project resources.

A primary function of a PMO is to support project managers in a variety of ways which may include but not limited to:

- Managing shared resources across all projects administered by the PMO
- Identifying and developing project management methodology, best practices and standards
- Coaching, mentoring, training and oversight
- Monitoring compliance with project management standards, policies, procedures and templates via project audits
- Developing and managing project policies, procedures, templates and other documentation
- Coordinating communication across projects.

Project managers and PMOs pursue different objectives and as such are driven by different requirements. All of these efforts, however, are aligned with the strategic needs of the organization. Differences between the role project managers and a PMO may include the following:



- The project manager focuses on the specified project objectives while the PMO manages major program scope changes which may be seen as potential opportunities to better achieve business objectives.
- The project manager controls the assigned project resources to best meet project objectives while the PMO optimizes the use of shared organizational resources across all projects.
- The project manager manages the constraints (scope, schedule, cost, quality etc.) of the individual projects while the PMO manages the methodologies, standards, overall risk/opportunity and interdependencies among projects at the enterprise level.

#### Role of a Project Manager

Project managers are assigned by the performing organization to achieve the project objectives. This is a challenging, high-profile role with significant responsibility and shifting priorities. It requires flexibility, good judgment, strong leadership and negotiating skills and a solid knowledge of project management practices. A project manager must be able to understand project detail, but manage from the overall project perspective. As the person responsible for the success of the project, a project manager is in charge of all aspects of the project including, but not limited to:

- Developing the project management plan and all related component plan
- Keeping the project on track in terms of schedule and budget
- Identifying, monitoring, and responding to risk, and
- Providing accurate and timely reporting of project metrics.

The project manager is the lead person responsible for communicating with all stakeholders, particularly the project sponsor, project team, and other key stakeholders. The project manager occupies the center of interactions between stakeholders and the project itself.

Many of the tools and techniques for managing projects are specific to project management. However, understanding and applying the knowledge, tools and techniques that are recognized as good practice is not sufficient for effective project management. In addition to any area specific skills and general management proficiencies required for the project, effective project management requires that the project manager possesses the following characteristics:

- **Knowledge**: This refers to what the project manager knows about project management.
- **Performance**: This refers to what the project manager is able to do or accomplish while applying their project management knowledge.
- Personal: This refers to how the project manager behaves when performing the project or related activity. Personal effectiveness encompasses attitudes, core personality characteristics and leadership the ability to guide the project team while achieving project objectives and balancing the project constraints.

Organizational Influences on Project Management:

The organizational culture, style, and structure influence how projects are performed. An organization's degree of project management maturity and its project management systems can also influence the project. When a project involves external entities as a part of a joint venture or partnering, the project will be influenced by more than one enterprise.

Cultures and styles are typically known as "cultural norms". The "norms" include a common knowledge regarding how to approach getting the work done, what means are considered acceptable for getting the work done, and who is influential in facilitating the work getting done.

Most organizations have developed unique cultures that manifest in numerous ways including, but not limited to:

- Shared visions, values, norms, beliefs, and expectations
- Policies, methods, and procedures
- View of authority relationships, and
- Work ethics and work hours.

Organizational structure is an enterprise environmental factor which can affect the availability of resources and influence how project are conducted. Organizational structures range from functional to projectized, with a variety of matrix structures between them. The table below shows key project-related characteristics of the major types of organizational structures. Therfore a project manager should understand the different organizational styles and cultures that may affect a project. For example, in some cases the person shown at the top of an organization chart may be a figurehead who is not truly in charge. The project manager must know which individual in the organization are the decision makers and work with them to influence project success

#### **Project Management Processes & Process Groups**

Project management is the application of knowledge, skills, tools, and techniques to project activities to meet project requirements. This application of knowledge requires the effective management of appropriate processes.

Project management processes apply globally and across industry groups. Good practice means there is a general agreement that the application of project management processes has been shown to enhance the chances of success over a wide range of projects. This does not mean that the knowledge, skills, and processes described should always be applied uniformly on all projects. For any given project, the project manager, in collaboration with the project team, is always responsible for determining which processes are appropriate, and the appropriate degree of rigor for each process.

A process is a set of interrelated actions and activities performed to achieve a pre-specified product, result or service. Each process is characterized by its inputs, tools and techniques that can be applied and the resulting outputs. The project manager must consider organizational process assets and enterprise environmental factors.

Project management processes are grouped into five categories known as Project Management Process Groups (or Process Groups):



Table 1.0. Organizational Influences on Projects

Organizational Structure	Functional	Matrix			Projectized
Project Characteristics		Weak Matrix	Balanced Matrix	Strong Matrix	
Project Manager's Authority	Little or None	Limited	Low to Moderate	Moderate to High	High to almost Total
Resources Availability	Little or None	Limited	Low to Moderate	Moderate to High	High to almost Total
Who controls the project budget	Functional Manager	Functional Manager	Mixed	Project Manager	Project Manager
Project Manager's Role	Part-time	Part-time	Full-time	Full-time	Full-time
Project Management Administrative Staff	Part-time	Part-time	Part-time	Full-time	Full-time

- **Initiating Process Group**: Those processes performed to define a new product or a new phase of an existing project by obtaining authorization to start the project or phase.
- Planning Process Group: Those processes required to establish the scope of the project, refine the objectives and define the course of action required to attain the objectives that the project was undertaken to achieve.
- **Executing Process Group**: Those processes performed to complete the work defined in the project management plan to satisfy the project specifications.
- Monitoring and Controlling Process Group: Those processes required to track, review and regulate the progress and performance of the project; identify any areas in which the changes to the plan are required and initiate the corresponding changes.
- Closing Process Group: Those processes performed to finalize all activities across all Process Groups to formally close the project or phase.

#### **Lessons Learned**:

- Project Management Office (PMO) needs to be in place in the organizational structure as per the guidelines of Ministry of Statistics and Programme Implementation (MoSPI), Govt. of India so as to run a project effectively while encompassing all the five Process Groups.
- Introduction and effective utilization of Project Management Software (e.g. MS Project-2010 or latest version) for all the process groups.
- To operate Online Computerized Monitoring System (OCMS). OCMS is developed with an objective to reinforce the mechanism for monitoring the implementation of projects by Infrastructure and Project Monitoring Division (IPMD) in the MoSPI.
- All the personnel directly related with PMO need to be trained comprehensively on Project Management through Project Management Institute (PMI), Inc., USA (website: <a href="www.PMI.org">www.PMI.org</a>) in endorsing the value of Project Management.
- Major projects require multitude of inputs from numerous specialized agencies from both within and outside the enterprise. The role of the project manager, therefore, assumes great significance in coordinating

- the efforts of various disciplines involved in all phases of project implementation such as detailed engineering, procurement etc. He exercises total authority and accepts full responsibility for the execution of the project. He should be provided with requisite team of engineers and other support staff and should also be delegated with adequate financial powers. He is responsible for the management of the interface relationship between his project team and the project team of the consultant on the one hand and various functional managers within his own organization on the other. It is essential that the project manager/coordinator, to be really effective, should report directly to the Chief Executive of the organization.
- The division of responsibility between the consultant and the project manager for implementation of the project should always be clear-cut and should leave no scope for any ambiguity about their respective roles.
- If a project is **very large**, a project oriented organization may be more desirable, in which all the functions and the resources necessary to accomplish the objective of the project are put in to a single hierarchical organization under the Chief Executive or Project Head. Such an organizational form entails additional expenses, which may be justified by the largeness and complexity of the project and are mostly adopted in cases where a Public Enterprise is created to launch a complex project viz. **Delhi Metro Rail Corporation (DMRC).** We had the opportunity to visit the Vaishali Metro Station of DMRC under construction and had an interaction with the Project Manager who shared some of his experiences and knowledge with us.
- The work culture, management style, and quality of leadership and decision making in a project are significantly different from that in an operating plant. There is a race against time from the inception of the project and a sense of urgency has to permeate at all levels of the project management team to ensure timely completion of the project. The project organization should, therefore, be distinct from the operating unit of the enterprise.

#### REFERENCES:

- PMBOK Guide: Project Management Institute
- Project Implementation Manual: Ministry of Statistics and Programme Implementation, Government of India



## TRAINING Snapshots



An In-house Training Programm on "Explosive & HSE Related Issues" conducted at ETDC from 14th to 16th July, 2011.



A Training programm on "Mentoring" by Amity Institute of Training & Development at MTDC from 13th to 14th July, 2011



Training on 'Basic Well Control' conducted by internal IWCF faculty Mr. K. Saikia, CE, CMT and Sri S. K. Gogoi, Dy CE, Drilling from 21st -22nd July, 2011 at MTDC



Training on 'Refresher Course on Drivers' conducted in collaboration with Petroleum Conservation Research Association (PCRA) at Oil India Club, Moran on 19th August, 2011



sphere News

#### **CALCUTTA NEWS**

#### TRUSTEES MEETING OF OIL





On 28th July, 2011 OIL Kolkata Office organised the Trustees Meeting of OIL. The meeting was attended by Shri NM Borah, Chairman & Trustee, Shri TK Ananth Kumar, Trustee, Shri BN Talukdar, Trustee, Shri NK Bharali, Trustee, Shri S Rath, Trustee, Shri NK Agarwal, Trustee, Shri VK Verma, Trustee, Shri BN Gogoi, Trustee, Shri TK Dasgupta, Secretary(outgoing), Shri BB Sahu, Addl. Secretary(outgoing), Shri Sambhunandan Baruah, Jt. Secretary, & Shri CK Dey, Secretary Designate as Special Invitee.

#### PRESENTATION-CUM-DISCUSSION





On 4th & 5th August, 2011 OIL Kolkata Office organised a Presentation-cum-Discussion on 'Water Injection Technology' of OIL. During the presentation session, all concerned senior officials from Production(Oil) Department, Duliajan were present along with the representativs of Parties responded against relevant OIL's Expression of Interest(EOI).

#### HEALTHY LIFE STYLE



A 'Health Awareness Programme on Healthy Life Style and Regular Food Havings" organised by the Calcutta office 22nd July, 2011. All executives and employees of Calcutta office attended the programme with most enthusiastically. The programme was Conducted by Dr. Ashis Mitra, Cardiologist and Ms. Moumita, Dietician of Ruby Hospital, Kolkata.

#### **FOL & AWARENESS PROGRAMME**



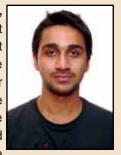
A prgramme on 'Foundation of learning' "F. O. L." and "AWARENESS" programme organised by Calcutta office for awareness amongst employees about OIL's operational activities. This was followed up with a programme by internal coaches from BP on 'Emotional Intelligence' competencies for self Management and Management of Relationships.



# Accolades

Bhaskar Pratim Sarma, an alumnus of the first

batch of DPS Duliajan, has got admission in fall 2011 to the Purdue University, West Lafayette, USA for doing MS PHD in Computer Science with research assistantship from the CERIAS (Center for Education and Research in Information Assurance



and Security). Because of his special interest in information security, he preferred Purdue over Oxford, Columbia and Yale, where he had also offers from for the study. Earlier in May 2011, he completed B.Tech in Computer Science & Engineering from the IIT Guwahati and had a campus placement offer from the Microsoft India. Bhaskar is the son of Prof. Mina Devi Sarma of Duliajan College and Dr. AC Sarma, former head of medicine, OIL.

Miss Snigdha Sharma, daughter of Mr. D. J. Sharma & Ranee Sharma, working in Field Communication Deptt, & Civil Engineering Deptt. of OIL respectively passed out Higher Secondary Final Examination 2011 from Salt Brook Academy, Dibrugarh in First Division with securing Highest Marks in Computer Science & Application in the State with 90%.



Mrs. Poonam Chaudhury, wife of Mr. Amit Choudhury working in Finance & Accounts Dept. has successfully completed her Chartered Accountancy Course from the Institute of Chartered Accountant of India, New Delhi in the month of May, 2011.



## GREENTECH ENVIRONMENT EXCELLENCE AWARD 2011

Oil India Limited has won the prestigious Greentech Environment Excellence Award 2011 in Gold Category in Oil & Gas Sector.

In a glittering function held at Sher-i-Kashmir International Conference Centre at Srinagar recently, the award was presented by Mr. R. H. Khwaja, Secretary, Tourism & Culture, Govt of India to Dr Udayan Barua, Executive Director (Medical Services) and Mrs Mallika Baruah Sarma, Senior Manager (S&E), Oil India Limited.



# FOUNDATION STONE LAYING CEREMONY OF DULIAJAN PUBLIC AUDITORIUM

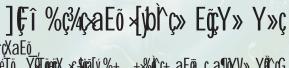


On Thursday, July14, 2011, the foundation stone of Duliajan Public Auditorium was ceremoniously laid by Shri N K Agarwal, RCE, OIL in presence of

several distinguished guests, representatives of Social Organisations, Educational Institutions, Media personals, senior officials of Oil India Ltd and general public. The Duliajan Public Auditorium, with its state-of-the-art technology and facilities, will fulfil a long standing need of the people of the Duliajan Township and its nearby

Estimated to involve an amount of `7 crore, Oil India Limited has taken effort to construct the entire building of the auditorium. The three storied state of the art auditorium will have a sitting capacity of one thousand people and the space at the ground floor will be utilised for exhibitions where artistic illustration can be displayed. The Duliajan Public Auditorium is an effort made by Oil India Limited to promote rich artistic talents of the region in form of drama, theatre, dance, art exhibitions, etc







×10 %+ +×1 CXaE0 LçTdî^ Y^îqî^» ető Yetrocox xestatív %+\_ +%d^c+ aEa\_c a 90vv» yêrçG Eö» åv » `xvþ stocktç [Whi[ý Y»œ̂Ēō ×XL» =dYdVX [ÞĚù Ēō»[ệ] %ç»O c ç+OĒcī(ÞK» XTŌK XTŌK XTŌK \@;;;; %ç¾>渻 Eō»[ệ] %c»c÷ Y**esô**rôc sô\_ç+ éGäk∻

 $A + acZ_0^- \hat{\mathbf{i}} \times \mathbf{E}_0^- \hat{\mathbf{i}} \times \mathbf{E}_0^$ acer-acērog % lícēx % platorax kvix Aāx azō Tōc\_c co Eō» [ý āxē/x>»ā\_rācērTox\* A+aoc Aoc āeH[ý ù Yesôroc % platorax for som lý\_To %+ā\_ %, ds a Eō\_c % local for Eō» % Yœsoroc for Eō» & Yœsoroc

\(\text{Tollory arguments}\) \(\text{Tollory | \$\frac{1}{3} \text{ | \$\frac{1}{3} \text{

%c] \$\infty\$ \text{V\array} \text{\$\t

aĒcī\_c WøS» aca^çGTc vYecō^caTcYecď äOcaacXĒcīa\_ Ēcīc^i I ùjéc÷=äPð %c×l åV+F[re\_ Yc+äK+e å^ =āVîcG %c»Oa[cL» Yc>& »»Eō=~l^X» EōxäS Eōc] Eōx ^cCōTō[rs a]l^Tō%c]c> Y»c LXadNc>S» Ydrōc`c

| yk i y y + ak + w > 0 | y a | Y + ak + a | = a | y = y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a | y + a ȍLîEő %ÜNYTő CY, Tö YÖLEŐ YÖLE Ő YÖLE Á A+ m»ÚŁWÓ E EdJ (ZÖLE CÉV) † ] Eő » Eð «çi ("» ĀÓE » AÓE » AÚL XË «(ZÜK÷»+—» = ~ÅÖ ] (ZÖX »ç+ L.» = ~ÅÖ %‡û\_ä0ŵ> =~∀ö%çxó)×çLîFX> açTxGEő=~∀ö\* A+ aäYçX [ýØ®YçX\*TöEőxç\* AEðTçy =Ÿó^-√l×\_L&\_ E@TÉőxç %çxó%+ã\_ %\*WEðYÖG√öEőx[ý Y»c Y»»ã[v A0c G×to åTic c\*

> Ø6 ù /-(AX åÉő%gGP4c.) %ç%çaEő]**F**í \*ITOT°ç



## %+\_ +2 \(\delta \cdot\) \(\delta \times \delta \



%+\_ +%lfç> 52Tij [jxbEõ aḍllg>S a\ip> %GB\Tö

 $\%+\_+*00\^r c \times \times ] \ddot{a}000\ddot{o} 52T\ddot{d} \ddot{E} [\dot{p}bE\ddot{o} addps S a \text{ } \ddot{\phi}FX 24 \text{ } 24 \text{ }$ 

 $a \vec{t} = Y * 0 \vec{t} \ \vec{0} \ UE \vec{0} \ [\hat{y} \ aeFîE \vec{0} \%e` \dot{W}_{o} E \vec{0} \ a \vec{0} \dot{W}_{o} \vec{0} \ \vec{$ 

 $\label{eq:continuous_continuous$ 

 $a\$d\delta \text{ $\%$} \Rightarrow a^{2}\cdot00, \ \ \{\text{$y$}0^{2}\text{ $E$} \Rightarrow \text{$\%$}0^{2}\text{ $\%$} \Rightarrow \text{$Z$}0^{2}\text{ $A$}0^{2}\text{ $\%$}0^{2}\text{ $\%$ 



 $Y \gg \bullet \tilde{\mathbf{q}} \gg [\hat{\mathbf{y}}\mathsf{T}\tilde{\mathbf{q}}] / \hat{\mathbf{y}} \gg \hat{\mathbf{a}} \| \hat{\mathbf{v}}\mathsf{T}\tilde{\mathbf{0}} \% + \hat{\mathbf{a}} \|_{\mathbf{a}}^2 / \hat{\mathbf{y}} \vee \hat{\mathbf{v}} \wedge \hat{\mathbf{v}} \gg \hat{\mathbf{c}} \vee \hat{\mathbf{U}} \wedge \hat{\mathbf{c}} = \hat{\mathbf{a}} \{ \mathbf{F} \in \mathbb{R}^3 \otimes \mathbb{W} / \hat{\mathbf{v}} \| \hat{\mathbf{v}} \wedge \hat{\mathbf{v}} \otimes \hat{\mathbf{v}} \wedge \hat{\mathbf{v}} \otimes \hat{\mathbf{v}} \otimes \hat{\mathbf{v}} \wedge \hat{\mathbf{v}} \otimes \hat{\mathbf{v}}$ 

`VŢjŵç+ %ç»Ó LçX[jè\_ xVā^` å^ åE@ŢlðYçXÝ» rāŒō [jŷSxlîEō LGTðTö \@\_ E@] E@» %;äK\*\* +Eð\x]Eō O@+]\$B%;>Ó O@\_ç\_ rĒŪ\\$ +Xā\ïā]3\b LçX;ā\_ï\$ā\_ç%; L»ÝYTö %+\_» rŒō xY¶ðTö] %ç` eE@^Ş\þ Axb æ` ðbö rŒō

 $\times 30\bar{a}$   $\times 30\bar{a}$ 

a] çl Eō\_îç\$ % \$\text{qi}\text{s}\text{ %\cong}\text{o}\text{Y} \infty \text{o}\text{f}\text{o}\text{o}\text{c}\text{o}\text{

 $\label{eq:continuous_continuous$ 



## A+ aeFîç» (çTö» $V\underline{C}$ YÎ^çLçXTö \öÇ\$QÎ\$4\_ $\gg$ āÎ\ $\times$ 00 a\$1600 c\ 'Eõ'' ā\_çEõ'

Eõ»[ý Y (>»[ý\*

<u>VÇ</u>ŶŶçLçX »çL§¾ç åYÛ ùçGÊ» %çNÇ»×`\_ç ØĕçYX



14 LÇç+, 2011 Tō;»āF %+\_ +%ō;» %ç4çaEō]ţî xjbî;
`VAX åEō %ç6Vqā\_ \öā\_āEō;LX xj\coronsista, aç]çxLEōé`xi uEō
%X(pāx)» Yðföxxiv ae[ytlāa;34], åEō;10/cxi)» xjbî\*cjijGi %c>0 »ç;L»
= Yxbōrīdōj\s Yvoo; TōVÇif\*cLçx »çL\$¾ç åYvouç6£+0; %qlip»; \_ ç
ØiţYX Eō;»\* %+\_ +%ō; x x adodos a]çL Eō\_i; \$ %qlipx %xifta
A+ ȍL\$¼ç åYvouç6£+0; Xfō Xdō Ybā;», Yvoxif XY+Tō;X/» »ÿTō
%‡û\_ā0;» x " ae•bī; Xfō TōUç Yba;» Eō;sā\$ AFX a=\$içXçY\$ō;
]‡û %ç6[yht;4;» = Y\* XçXqlips \$ »çL\$¾ç %Xçiix Yç7tij; Eō;sā\$
a Gyylç %ç6[yht;4;» = Y\* XçXqlips \$ »çL\$¾ç %Xçiix Yç7tij; Eō;sā\$

å`l^ç»e [ý¾Øıţā» ae^Çlþ\* +|^ç» Zō\_Tö VØTiG¬TöTöEç^î1 i]  $*a^i$ QÜÜGЬS Eö»[ý Y»ç ^ç[ý Y»eō"Xç YØQTÖ %ç»Ó a¶Xl^ ØıţYX Eō»[ý Y»ç ^ç[ý %äXlbS -=~|^X» a]|^ »çɛ÷Eō»[ý Y»ç ^ç[ý %ç»Ó \*QYV» a \*QŸV Vb Eō»[ý Y»c ^c[ý

%TôḍMJAEÕ aç-a&JMJc a¶ÐXÄTÖ X] ŢS EÕ» [ý \_Gc VC Ĥ CL CX »ÇL ޾ç åYÛ MGÊ äÛñā¾ VC Ĥ CL ÇX ŠÔC »» [ýæ³ Vça EÕ » \_ GáTÖ ÞÍ JÁ JÁ Ý CO OT) åEÕÇĐÔ ÛEÕ; [ýð Å Â ÂÐ YÁS EÕ» [ý Yỷ açTÖ åEÕÇĐÔ (O7) åEÕÇĐÔ ÛEÕ; [ýðĥ ã» %+\_ +%lð C; + X] ŢS EÕ» [ýe\_ å\_ç¾ç āEð [ýc] c÷ Ĥ Ç åYÛ MGÊ \*ĐOTÖ AĀĒŌ ĀG ĀG-L Ç» ]ÇXÆc÷ [ýc÷ %XÇÞÏX = Yā\ŒG EÕ» [ý Yç» [ý %Ç»Ó + Ĥ Çû TÕ »] c÷ c (ground floor) æÛţ YÛ ` KÝ» [ýā[ý [ý³/c ç» EÕ» [ý Y»ç ^c[ý ~ GáTÖ %XîçXî \æa\_] çX %ÇMJAEÕ aç-aÇIMJC åYÛ MGÊ \*ĐOTÖ aeā ÇLX EÕş c c÷ [ý \*X] ŢS EÕÇ î a¶ÐY ŚĨ åc ¢¾ç» ×Ý ÞOTÖ ÅYÛ MGÊ \*ĐOTÖ AFX ŤÃTÔ » % + +%lð Ç ×L\_ç EðTÃTÎ I Û %Ç»Ó »ç+L» YÐTÖXHÃN G \*POTÖ AFX ŤÃTÔ C C FTÖTÖ %YS EÕŞ c c÷ [ý\*



## a\cCeV zc;4

EÊTÖ KÇY-KÇYÝÊ\_ %×\0X3VX

A+ %X¢iqxāTöå\queek zqē%» Y¢hó% Y\*nyEqēF\*xk» [yīno]çX» Y\*nyFeqēFxtā»ç £\ö=āXkshóx Eqis ` NxXY Vwo+\*

a\op>%ÜdröYdvxx x l iEō` vxxy vww C ` vyðaxxl\_Tövlóv; (\$oy>` "Ý, Eō\_ç > l iEō) Eō å\opGev zō%> To>Zō> Y>; a¶ddykç Lāxç4ç cir\*

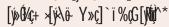
## × £-a]@»@» aZo\_ a]@Š

27 %çGrô 2011 Tip»āF \$ip»GgC-Øðfö%+\_ +%irç ×\_ $\times$ ] ä0005 %ÜØ61Tö å\igGêV zip¾Tö× £-a] çā»çc+AF $\times$ X %XQedTöéc+ $\times$ r)\* = ä $\times$ Fā^cGî å^, zip¾

Eçç^iX[yçc€ō» ×a^içÜð" %Xþa» +e 12 Lçç+, 2011 » YābEðÎ^ç Eçç^ïatðða Y»ç %ç»√sö åcç¾ç × £-Eð]î ç\_ç AF¾ a]çŠ c}\* A+



Eðji ç\_ç F×XTöX¾YÛLX½ × £ Kţy-KţyÝaEō\_Eō%a] Î^ç Eŏ{jTţ %ç[Ĵwwo CY»Tö¬{j× rôEō{ `Ŭ] Tớ `çÜØKţÎ^ç `+Eðl^ç %ç>OaeGYTö × "Ý YeEðL åLîç\Tö[j>ؼ> T楼MjX %a]» LçTðl^ aeGYTö `Ŭ]Üðl^ eEō>āl¼»¾ðTö [j>GYTō åLîç\TöYðaçl/ %çG»¾\_ç åV¾» åLîç\TöaeGYTö %ç\J» å]ì×\_Eō THE MAC and the angle of the property of the contraction of the contr



#### <u> VĽ</u>Y`¢L¢X Z¢%





35Tî]ÊaâVî %a] V[ý; YŶTĕ^Ç¢GTĕTÖ VÇ\_Y^ÇLÇX zĕ[ý» V[ý; åF\_&%aEōi\_ aÇV» åF\_ YÛ`X Eō» Y&•ō;» %LÛX Eōi» %ç>Ó[y&äEō+LX LçTð/^ Q\$;ä]30Tö%e` GÐ+S» [yĕ[ý+X[y¾dTöc+\*\*



24 LÇç+, 2011 Top->āF >[yê rô [yê îL ½ %ç>Ó Eddx ]c+>[yîç\_h'> Yonbx = Ydyî Lù ` Volata Vwo> éaāTö %Üby† %c\_çY %Xopox> %çançLX Eō>ç ch'\*



## 

""%VЫ \ö¾bîãTö {ypûçX» %¾VçX''

YÛÇN $h = h^2 C_* L^6 A - h^2$ 

+XijMŊ°%çL» XXTö%a≅840609° å^X [Ŋ§ãTç Eð]⊬ A+ YÒQŊþ

┧ŊſĊ> ZÕ\_Töaᢒð4éc÷=メタ₫ӳ

1\* Îby ∏GLÇ (Artificial Brain) 2\* Zobû ∕Zō0ö (Force

Field)

3\* To→ YÛ X VØ (Wireless Electricity)

4\* €=å]X Aå•tåEå\_0XK÷(Human Exoskeleton)

6\* Q AX. A XEM at (DNA Sequincing)

2) %+\_ +% (c) c) asaEall f) • (j V() (c) x sEal Call in the condition of t

bined Annual Training Camp) III

%e` GB\$ E6» {\\lightarrow \lightarrow \lighta

éTő XG»ÝFXê åG컾 Eŏ₽Ô^c+ %cXã¼≛

OIL INDIA HIGHER SECUNDARY SCHOOL, DULIAJAN

Cross Country Race %Tö\_'»¢» `¢fţTö%¢]» F¢X %¢»Óa&¢¾ç½\)» `¢fţTöY[ýc\_Ý0qā^ à`òböYeTā^¢ÇY\* EqLÉq¾cL YeTā^¢¢GTqTö12 ¾bV\_» \dTö>TöÄ+ x[ylîç\_l^» V\_xlòà`òbàc¢¾ç» \_ĠāTöV\_lî^ &£ţ, é]yÝ%¢»Óacā^¢¢Top» [ýā[ý=Jò0ðy» Yðeaç [ýb. [ýe\_a li] éca&;\*

\$ôp>>CZōrā\_ \$¶|TEôlî^ ålùy GxRôT&\_ alî'i> Y>ç xXGīTö åcçi¼ç %xXrdEōp>Ý

»× ½å cbS Eõ» YĒU¾Ēõ al§ I ù; Eõ»[ý\*

\*\*C\*X\*\*\*JVÇd AāX A\*\*JVY\*\*JVÇd A\*\*JVÇd A\*

♣ \ö¾bîd ¼jpûçX» \$6TÇJā0ûç YÔÇNb c½ ""%≠ā]X Aā•ũã•ũã 0XK; '- %≠ā]X Aā•ũã•ũã•0XK; L≫h°āTö]çXệc÷]œaāY`½ ČY»Tö %¾Eō åLç» ¾¾1°çêEŏ]GLÇ YÛŏIù¾āVŪTö%a¸¾4 Eūã]ç a]çMçX Eō»[ýYç»[ў+1°ç» L≫h°āTöaç]cXîTö] [ý Yðh°çG Eō»ðh°+ 200 Yç=%ø

Y^Uðbåc�nic Yðf^cG Eō»çä0ic a≅ð4Y» éc÷=≯i∫ý\*

\*\*Color \*\*Colo

**lo**[yv[d Ed]c> `]c> "]cX¼ L½Xkê\_ é[yYk¾EōY>>[y1 ol %cX[yY>c Ygndic = àc6/X''> acet`é\_ - `vYch6r`i [v0lic, ]c4|öV X[yk3Xc> >c4]cX, V`]æ6Y



LXTip»  $aEqqhycxy %+_ + %hyc+ *XL' * Eqqy iEo_cy aqqyeby$ Ý×»āſŷ ]ÜÁVа» ×XÂVŮ %XÁ;» ×Ŷ åEōŒXÇXTOX YŒŒŢŌŒYX EŌŞÇ» %CGaToTo» Y»ç %‡û\_aOiçTo= $\grave{a}$ 64 c $\{\acute{y}$  Yȍ Yç»Yç×  $\rat{E}$ 0 Y0.iç¾ (Y»»ā[ý ŢŧŪç %¢Jŀaç]çkLEð) a¶ðyāEŏ {ý V¯\¤ä¼ %WiñX Eó»ç %ç»Ô »ç+Ľ»

]T¢]TöGÐS Eŏ¸ç [ýMjT¢]ÉEŏ

LÇç+ ]ç;» 07 Tip;»ãF XçCç; YrçTij%XqaTi;»çL§¾ç £XçX» ]ç»Zãd åEtatjov cxxia) add nefcto xcc»Eddirc %c>0å^c>clcx %tû\_toxxjtS Ete>[e\_ YĎŪV å\_c¾c a\$āĒC‰) a0êEõ Zcc] i (Secondary Tank Firm)» a¶b/EōTö Ȣ+LEō %¾GTō Eō»\* Q8 LÇ¢+ Tō»āF [vHL¢XTō %X¢ed ō »¢L§¾¢ £X¢X a \ōTō[\$P;Y\$y åyteō» % $\phi$ 0Y×] $\phi$ 9 YðLkō(BCPL)ė\_ Y¢Eb1 teō åGK» å^çGçX M% [j» [j» EqxãS ×X] qS Eqxãf qGlf°ç xT6XQqc Yç+Y\_ç+X» a³V\dr̃o»c+LEóLáXc%c´cF\* åTäXVa» addjoFçTo-Xcc»EddYc-å^c>çLcX, ×T®X\$ÆÔYÇ - RÔ\_Ç%Ç>0 QQQQQ; - åYãløY%‡û\_TÖ YŒBŦŒŐåGKãlùy» Y00%4Töa¶Y@c>S»(Expansion of Gasfield Development Plan) a<sup>3</sup>V\00 %cGrô ] cc. > 23, 25 %c>026 Tip. > aF ^Uçy(bi] > bçY(s, Ed'ic\_XY %c>0 [vòceYLcXTo »cL§¾c £XcX» %arclx Eox éc\*K÷\* A+ aEō a[jo» »cl\_§¾c \_£XcX» =ã¬î åEōq¶dYcXY ToUç »clîFX» \_Eōc>āS YŒð" a j É» Ý Žì cLXÝ Tig, Tip» Y» c » c+áL \_ c\ö Eō» [ý Y» c Y Tip l ù C Yā» cl ù  $= Y E \tilde{\mathbf{q}}_{x} \times T \tilde{\mathbf{q}}_{x} \frac{\partial}{\partial x} \hat{\mathbf{q}}_{y} \hat{\mathbf{q}}_{z} \hat{\mathbf{q}}_$ a¶dYEőTőLXadNo>SEő%cGTőY>>>ő> K+fýVcXrvNo>c, %c>0åTöFTöaEő\_> TicTöGÐS Eőséc\*

ȍL§¾ç£XçX Xç]» [ŷ¾ØijäQŷp»]dNj]TöaEõi\_çã», %×\õjTö;%ç»Ó [ŊŊŊŶ£X¢» a@^¢G aĿţôĒŏō¢ cŦ\* YŎŎĿŸŦŏŹ åĔŒŎXÇŸŨŒ»» ŸŶŨď°» Zō To »ç+L» E@»åS alrôc-[ýY»ç a ] aîç» a³V\@öce=\$6E6J-80[y;\$@[y EōJ ���^ %çXβΦpXEō \@Ã% »çL\$¾ç£XçX a`\\$p> %çã^c,LX Eō»[ý\_çãĞ^^†Tō YĐỂC EỐC AXMO [¢ %AXMEO YƯCX m»ŒMYC CH %OO AEO Ç å]ìFEOEOU-[yToc X-U \N\) EỐC CH\* Topo CY» Y»ā[ŷ » CY» TōY» [ý Yȍ Y0,004 [VxVI) [v YxxV c » 00000000 = a-KV %cV {\b) a [vc + Y00000 mx \text{Leavy of x } %cX Educto Educ Ga x c \_ \$xc \text{Excx} \text{ ecant } x \text{Tox Y \text{Log} of x } a<sup>3</sup>V\drö%e` Gds Eō» ] Eō\* a\crov0 A=xcYX Eō» [ê »c+L» Axô 

ÝŒď′äÔŵ¸×X]ïS´c{ý\_Ğç ØĬ¤XTö[ý; Tĺ¢» Č\$ô›» Øĭ¤XTő′a[ŷ?¾Østö trol Board) %U[ý;ØʧX`wø`çaTö »çLî» YVbS ×XY`U& a<]×Tär` (Union Eō»[ý\_ďaG\* +ľ\overline EōvaS ae× Aô%ďa[VVXEōvyYar VTeōr'aôtox \LX SPCB /UPŤCČ» avaí asiów %cov dwy ja Éco Actioto Ya» atofto C\$ô>Tö×XWc>>Töa]^> ×\ôTö>Tö>cL\§34c £XcX> %câ^cLX Eõ>[\$> [\$> Eõ>ãS %@[\VX\_L\Xq\y\_@GC\*\_^\V@c÷Y\#\\XTo\Y\Eo\z\argan{AFX}\@K\\Eo\L\_c

ȍLî %U[¢ ØΦŶ±¤ çaTö»çLî aç]»» \_^\* åTäÜÜYŶTFX ×L\_ç, »çLî [v͡ɕ ØÞpF±Þà çaTö»çLîTöå[v͡ŋ\_āG ðŤv͡ŋ\_āG AðX »çL§¾c £XçX a\b>

\(\frac{a}{c}\)\(\times\)\(\times\)\(\frac{a}{c}\)\(\times\)\(\frac{a}{c}\)\(\fra YOTOOOX [v J) oG) Y» â[v % WyrXEoxY âY d/cxY allox acarcgīto % tû alûştő y le d'alûşa ay ci y y » ç a serakî y y y ç x le o y luşa x şi ba' + x o alûşa x y v keza x kirix e ç y y y y ç x e c y ç environment Eő»[ý\_¢ãG\* ae¾ Âô EồwÃY I lia] Ác÷XL XL Aã\_EçTő A+ YÐTö[[VX» a¶ďĚďő ľýs\_ YÔn; \$0\_cfý%; Ő+KŒŐ ſŷNDEŐ %ÄŐTÖæYÖS EŐ; Íje\_ %X6»dW E6»Tv\*

SPČB» aVaî aştaï¼ YÔLkô ØğYX Eö»[ý\_GY^ç Y0TöcöX [ýç √γλισG» Υ»ς ΕΙΑ» **F\$ô**»ς Υθ**Γα**ΓίνΙΧ ς\öΕδ»ς» αςΤö∛ΙΧ» ×\ðΓö»Τö»ςŧ¾ς ĖX¢X» \*VX, a]ľ %¢>ŮØøX \*XSľ\Teo\*, åa+]ā]i [ýTo\*; EoŒoToTo L¢XXÝ Lç»Ý Eð»[ý\* A+ a³V\**ð**rö×yÔrç - YðröyÔrç YĒtōç` Eð»[ŷ\_ »ç+LEðÁy` \(\frac{1}{a}\)\(\fra =Ya^Qlb Y^a^» ALX xyb^c+ Tellankx %c>0a\left xelledo>

SPCB / UTPCCål^ »çL§¾; £XçX» åGçä0ê+ Eõç^îy0]×SEõ;» X800%' å»E600e Eco» %c>0 ^Uca] hTc Xhcleo Eovby I v (Regulatory Authority)é\_ E@^îx[¾»S!» éaāTöT@ã»ç AO@Y9Të\_x/ a\@Tö=Yx0dō

a]£÷»ç+L» aNd ac+æY0S Eoo»\*

YÔL kô Đặc X TếT BÀN (V ĐÃI) X TRIĐING X YẾT BÀN (V ĐÃI) (X TÝ ĐÃI) THE X TÝ ĐỊC X TẾ TẬN ĐỊC X TẾ TẬN ĐỊC X Àðán» £X¢X a\ip> Eiç] %p>=ö Eip>\* á\ipTi =Yx0fTi ŲEiçמ£EipžXç ŢŷĤĪĦŶŶŨĨŸ» a¶ŴĔĨĨĨŊĸĨŢŴXĔijŇŸŊŶċaeŢŴŢŷ&rďĔijоĬſijŵŊĬŷ ŶĸijŶSPCB» ŶŶĨĸŊĬŶĔĬĬijĸĸŢijĸĸŢijĸĸŢijĸĸŢijŶŶĬĸŊ EdUc, ]Tic]Tö%c>0=ä¥G> YßeFcXlYeF adioEcc.>cxF[v́%c>0a\io> à` bTö åa+ Ēc̄(^j͡ᠯ/Þ/w>SÝ ØtōXYÎ^ \tipoçTō YçPō Ēc̄w) £Xçfy\* ā[yaXvəTōyŌi] GE¥Tō a\ip> YQTa[yX (minutes)Tio/L\_c> V%q\\right) / at c+\ite(/ = Y\right) \%\light[\right] Eō»[ʃ\* »çL޾; £X;X» Eō;^î;[¾»SYFX Gð] Y‡û;Tö ¼\_ç,Y\*bV, ¼\_\_; V¼;dW; /a];; Hō; Eō;^î; 1°; C Y; PiC¾;; V; ae× hô SPĒB / UTPCCah` āticē\_ Œõ ﴿jviçch` á¼(¶q+0ītio LXadviçss» pûçtiçāUi a\o\ Eo\î\i\v\s\fx\Y\o\ Eo\[\frac{\circ}{\circ}\]

%(PäVX» ×\dī b\To\XI^c]Eb\Eb\B\VI\u\((Regulatory Authority)\equiv \Exc\X a\op Eq^î={j%>SY aY&S E@;[y\_qaG\* Topa AOg Y@T@\_xY Y@d" OpYX

Eő»[ŷ\_ å\_ç¾ç YÓTÖCÖX [ý; x[y\QCê\_ YPQ[ý\_cãG\* %+\_ +%b°;> Vå» F;>O¼; åTö\_%;>ÖYÇEB;TŒŏåGK;> %äXÜS;  $= dY (VX \% ) \overline{0} Y ** [(c \overset{\checkmark}{X} E \overline{0} ^*) T \overline{0} \overset{\checkmark}{X} \overline{a}^* (A L T \overline{0} \overline{a} L \overline{0} ^*) 0 (c \overset{\checkmark}{X} ) \overline{a}^* (A L T \overline{0} \overline{a} L \overline{0} ^*) 0 (c \overset{\checkmark}{X} ) \overline{a}^* (A L T \overline{0} \overline{a} L \overline{0} ) 0 (c \overset{\checkmark}{X} ) \overline{a}^* (A L T \overline{0} \overline{a} L \overline{0} ) 0 (c \overset{\checkmark}{X} ) \overline{a}^* (A L T \overline{0} \overline{a} L \overline{0} ) 0 (c \overset{\checkmark}{X} ) \overline{a}^* (A L T \overline{0} \overline{a} L \overline{0} ) 0 (c \overset{\checkmark}{X} ) \overline{a}^* (A L T \overline{0} \overline{a} L \overline{0} ) 0 (c \overset{\checkmark}{X} ) \overline{a}^* (A L T \overline{0} L \overline{0} ) 0 (c \overset{\checkmark}{X} ) \overline{a}^* (A L T \overline{0} L \overline{0} ) 0 (c \overset{\checkmark}{X} ) \overline{a}^* (A L T \overline{0} L \overline{0} ) 0 (c \overset{\checkmark}{X} ) \overline{a}^* (A L T \overline{0} L \overline{0} ) 0 (c \overset{\checkmark}{X} ) \overline{a}^* (A L T \overline{0} L \overline{0} ) 0 (c \overset{\checkmark}{X} ) 0 (c \overset{\widetilde{X}}{X} ) 0 (c \overset{X}{X} ) 0 (c \overset{\widetilde{X}{X} ) 0 (c \overset{X}{X} ) 0 (c \overset{\widetilde{X}}{X} ) 0 (c \overset{$ Y»a» [kîŭEō»[kî ^cCato%LØbYtoakx) axurx cfy\_Gcct %c00 ĄāEōa]ľaTġY»āſŷŶŮď%¢»Óa]¢L×ċĖTĠŶŶĠĮĒœĊŶ¢ŢŶĔŏ»[ý\_Ğ¢ c#\*\_AāX\_YeTjöeqX>\* å1 ùyTö>çL\_§¾ç £XçX> [ŷ¾ØŏqäQûç %×Tö l^ m>Q±8/65] LXadNc>āS = \$6Tö < Vhôc> åYc24c> a@VNc c\öEö>>äK÷



**`Ú\$**ŷXEø`\**É**AÜ; Eŵ>Eŵ\Ýåa¾; {\\**ö**G(FXX)

(E» ](\_(G(xPi)

a-c#Var^^ç**st**ã\_ç %&**x**3VX \*\*

åc÷\_ā]00 A0i; \*[yliq>» Aa]l^Tö c+[ýUlg>» F;+ Zg>»\*kå\_;;

åTäXāTöA\*/X aāYçXāTöYçā\_çêG AFX [jûðð=ðlìçG XG»Ý ^'TöðVFç Yçā\_ç »e-\*[j>10> åc÷\_ā]0ò`ç>Ý`ç>Ý \*[jî ç\_çEqî^`^Ü&Yç;Tā> F\*\$6Tö%çEçî` Tö\_Tö cæTö186EöåYç;4;aTö`KîāTö%c#; CY\*1ð

] + Tiçã» + A0iç Wj» [jê\_ cţTöå] × ā\_ç × ak÷åEçãXç A0içã^ç acāL Wj» ç \*/[ý XÇŞLā\_ Eç»S, Wj» ç \*/ā\_+ å^] + TiçEō Y » WjX Eō»] % \$\doldo \doldo \cdot \cdot \cdot \cdot \cdot \doldo \doldo \cdot \cdot \cdot \doldo \doldo \doldo \cdot \doldo \cdot \doldo \doldo

[ýc¾ Eő»[ý Y»ç c½]
a»Óc½ā\_C AFX aeaç»» \öp>
%Xçã^āa ]Çç]ÇF c½[ý Yç»]
»'V-[ý»bŞ, Lc÷%U[ý; Lç»
YÃ^çLX açãYāl ù
¾EØJLXāEō; ¾µùç[ý Yç»] AāEōQū; åc½ā]00
=VIo;+ åVFÇ4(ý Yç»]
\*acejő» [ÇÇÇŞ Tō\_» YÂU¾Í\*

cę» ] Xç XçKā\_ç ] ā^ç
½ ¶öc+ā\_C AOi; Wjxxāc+Axxā\_ç
%çxO åTöxTò^çx Yx;+
]+ éc+G ā\_ç ALX åc+ā] OWjxÝ
a\$iYç x a'aTöxU' éc+UçEdjý Yx; c+ā\_ç
aGā[ÿ
[ýjO8/x xe-Toj\_Eōjāx %qjEdjý Yx; c+ā\_ç
Lýx/x\*

åaì^ç+ %ç≰<u>÷</u> £\ip>₃ö

Töp×YK+TÖ A OĞ A OĞÊEĞ YĞI] [y§ÄEĞ+OĞ+
%ç&:\_ å]ç> %ç^wê\_

\* A×TÖ^ç [ç;+EĞ\$Ğ;\_EĞ> c;TƏTÖ
éa×XEĞ[YYĞ> c;TƏTÖ
\*\X\X\X\F\*X>]-S-]ÇĞTĞ å[XÖĞ;ÇLX> c;TƏTÖ
+TĞCX/+TÖCX/\*

- TôYX [ý»Ó/4c

A. X. L.(^ÜHEÑS) X\nG

] çãUç U\_ A0îç ×[yfiç»» \*kã\_ç \*PiEō AāXêEō Abç» Eð [ý» -

[\SāE&+Oûç cgdae+\_\_E@+ %cäK+aT@]c>
[\E&D ]cLTö

\dio FX \$\hat{a}[\beta= aaai^ [\perpression \text{Eo}] X \text{a}Xa]\times\_[\perpression \text{A}\text{a}]\times\_[\perpression \text{A}\text{a}]\times\_[\perpression \text{Eo}] X \text{a}Xa]\times\_[\perpression \text{A}\text{A}\text{a}]\times\_[\perpression \text{Eo}] X \text{a}Xa]\times\_[\perpression \text{Eo}] f

AO\hat{a} \text{Eo} \text{A}\text{C} \text{A}\text{A}\text{C} \text{a} \text{A}\text{C} \text{C} \text{A}\text{C} \text{C} \text{A}\text{C} \text{C} \text{A}\text{C} \text{C} \text{A}\text{C} \text{C} \text{A}\text{C} \text{C} \text{C

%¾ã` bTö×a aX¼öc+\_\* ]+ãc÷c+[ý åXç¾x»ã\_ç!

åc÷Y**0**\\S a]çL! Ø Eő [XXX¢ éc÷ VØy» ×X`c å ̈ç¼ç Yç√b̂ A» åVçYç\_xY0ûç [ý»b(\$ XVL& aRã» EőS YTö» cęQbE@Yç%ç LcȋEcc =ãY l ic Ec» %¢G[ýxŘb å^ç¾¢ Eďĺjoří úy» ľýď÷%ďořXê\_\* XL06%ç`ç'%¢Eç...îç AEq̃b»ì c Éõ» éÚ, Eð¶öjae•ÉvTŒő [**ÆØ**Töaç[ý�ôé\_, %cG[v(Nic aEii\_cx0) AÉ@GCOÓ éc.\* √NÿGŶ ∧ĕTï> ]çLTö G¢PÖ]**EØTÖ**» ]c\_¢ F¢»0¼¢ åTö\_ %ç>0 åGK÷ FXX %\\operatorname{0}\operatorname{0} = dY\text{dYX} Eðflöi %ck: LÝÁX» [vTð åc÷]cęX `@]Eõ[ýµQ! åTiçī ç» TöçG, Eðfjör Y000c A E TO TO WOOD E TO WIT I A KNOW axkx, c+T6xcYc\_c XçYç\_ç ` () » ]^îVç\* åV`» YĠ√ō» cãEõ ȍ+L» Eō\_îçS» [ýā[ý  $+ + \% \hat{C} \times \sqrt{\hat{a}0000}$ Eõ» %çc<del>ä</del>K÷ [\§ %}\dvX %X**(Y)**STöéc÷%;AL =āViçG LGTö»; ×[yä-K₩» ×[ybçVTö åaā^āc÷T67 åXy L\_ Ö\$Eõ %ãL^ `\*\\b £Ĕ6\_ç YçTdö √yî ŸLGTö>'\* Eő<u>·</u> ľç å[ýá\_ ã» ÄãX %¢V`i> %X@Y@Sçã>



%çãYçXçã $_$ çEõ $_>$ %¾a» LݾX ]₩**҈**> %ç»Óa**ç**]h c:C**ç**ã...

Wły X¢, auto, łyka łyka





ŇŇĒĢÜPŢŷç, XÔASÔXĴĖ\_e XſŅĢG

`ŎĸÝ\_E@ÜðY[ŊŊĸäGgcç+, ål ùy %×\ö`çÜdeő \j\\@G



ĎTö>ĆS \$8VĐåQŒõç, YÉVÇTÛ\_VÎ^ =dYÇVX ål ùy xQiGê[ý



`**V**A] \$6[ý>Ó¼; EÍY aeã\_FX {j\njG



Ŵã` Œõ c∉L≫Eữ, Y»[¢X {Ŋ@G



## 65 ta ° ÉiÉAÉIÉÉ ÉÍN ɰÉ BÉEB àÉÉBÉEB {É® +ÉÉ® °ÉÉÒ < ÇUÉ®É ÉÍNA MÉA ÉÉÉ THÉ BÉEB àÉÖ ªÉ ÉBÉNÖ

ɶɪÉ +ÉɪÉãÉ <MoªÉÆÉ,



noble effetive de de la comparation de la compar

ABEE "F] NOT XE E'NXE I L'ALE BELLEXELOBELA" OLE AGA +ELPELAE < MID-TE EBALLOBE] TO BEEE = KE®NEEPELE E =KE®NEEPELE E =KE®NEEPELE AECH E AGE = KE®NEEPELE AECH E AGE = KE®NEEP

BÉEÉD JEEN BÉE®XÉE CÀÉE®E NÉÉPÉIÉ CÊ

<° °PACE ala ala ala Euro °C °CENTE CECCE ©CE CECCE °CE CECCE °

+ttplat <nbox to the control of the

+¢°tal |ingle ipilie itterak ipilie ipilie itterak ipilie i

+Eftxía (EEPSEFatxi Ffji Beta +EFF-(EFF BETA AEMPTA IE IEE \*V\*\* BETA OF EEMATIN EE IEE \*EEFEFFO CE ELVICA (EEPSEFATXI FFji EE A SEMATE) CATA \*EETA\*\* CATA \*EETA\*\*

(L'ELECTION | |L'ELECTION | SEET | CONFIENT | LITTER OF CHECK | LONG | L'ALECTION | L'ELECTION |

ateta tettuated et « seta officiata ata = aa faut ebet et let ebe et et eac atou ebet et let ebe et et ebetbe of ebetbe et et ebetbe et ebetbe et ebetbe et et ebetbe et

ABE +EEP VICEN cai °Fet Editatber = term t 'ealeve bea (EEP (EEP) (EEP ates coidbeel bea of caidbeel bear of caidbeel b

ABEE +KWªE AÉCI ÉLÉBÉÇAÉĞABEEE =BĀBAJE BEENKE SEECMEE ÉBEE +EEPÉRÉ < MLD-TE ÉBÉÉBÉ] DO "ÉV" "É "PÉÉLÉD BEED" CEÉLÉD ÉLVEABÉMÉ ÉBÉEA VÉLKÁB BEED" ÉLÉBÉÉ O "ÉLVEABÉMÉ", "ÉLVE BEENE" ÉLÉBÉÉ ÉBÉÉBÉ] DO "ÉS < NÉ "ÉLÉBÉÉ BEEA VÉLKÁB BEED" ÉLÉBÉÉ BEENE VÉLKÁB BEED" ÉLÉBÉÉ BEENE CÉLÉBÉÉ BEENE CÉLÉBÉÉ BEENE VÉLKÁB BEED" ÉLÉBÉÉ BEENE CÉLÉBÉÉ SÁ "ÉLÉÉ BEENE CÉLÉBÉÉ SÁ "ÉLÉÉ BEENE CÉLÉBÉÉ SÉ "ÉLÉÉ BEENE CÉLÉBÉÉ SÉLÉD" ÉLÉÉ BEENE CÉLÉBÉÉ SÉLÉD "ÉLÉÉ BEENE CÉLÉBÉÉ SÉLÉD" ÉLÉÉBÉÉ SÉLÉD "ÉLÉÉBÉÉ BEENE CÉLÉBÉÉ SÉLÉD" ÉLÉÉBÉÉ SÉLÉD "ÉLÉÉBÉÉ SÉLÉD" ÉLÉÉBÉÉ SÉLÉD "ÉLÉÉBÉÉ SÉLÉD" ÉLÉÉBÉÉ SÉLÉD "ÉLÉÉBÉÉ SÉLÉD "ÉLÉÉBÉÉ SÉLÉD "ÉLÉÉBÉÉ SÉLÉD "ÉLÉÉBÉÉ SÉLÉD" ÉLÉÉBÉÉ SÉLÉD "ÉLÉÉBÉÉ SÉLÉD "ÉLÉÉBÉÉ SÉLÉD "ÉLÉÉBÉÉ SÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉBÉÉ SÉLÉD "ÉLÉBÉÉ SÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉBÉ SÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉD ÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉD ÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉD ÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉD ÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉD ÉLÉBÉÉ SÉLÉD ÉLÉD ÉLÉBÉ SÉLÉD ÉLÉD ÉLÉBÉ SÉBÉ SÉLÉD ÉLÉBÉ SÉLÉD ÉLÉD ÉLÉBÉ SÉLÉD ÉLÉD ÉLÉBÉ SÉLÉD ÉLÉD ÉLÉBÉ SÉD ÉLÉBÉ SÉLÉD ÉLÉD ÉLÉBÉ SÉLÉD ÉLÉD ÉLÉBÉ SÉLÉD ÉLÉD ÉLÉBÉ SÉLÉD ÉLÉD ÉLÉBÉ SÉD ÉLÉBÉ SÉD ÉLÉD ÉLÉBÉ SÉLÉD ÉLÉD ÉLÉBÉ SÉD ÉLÉBÉ SÉD ÉLÉD ÉLÉBÉ SÉBÉ SÉD ÉLÉBÉ SÉBÉ SÉBÉ SÉD ÉLÉBÉ SÉBÉ

(EBER, < 'e afast (t'' 'e'a afe 'efffovix' 'e'ne-xefa beta +t(that beta ht (that beta) = i(tensetif | tetteti clattoce -thate < 'ebet | tette | tettex |

| tette | tette | tette | tette | tette | tette |

| tette | tette | tette | tette |

| tette | tette | tette |

| tette | tette | tette |

| tette

cat °faft'Egyffolftbete'e beta ettevixt beta jetji bet-wia beta jetji bet-wia beta jetji bet-kolotebete'e beta +filiç cè +fertal <br/>
"Event det ettbete'e cata <°t illo beta ettbet'e, {ettevita beta beta ettbete'e ille fbcm °oji °ta Figi f<br/>
"Event det ettbete'e cata <°t illo beta ettbet'e cata <°t illo b

âté < °C + É C'C (E + É C'C)))))))))))))))))))

< NIGH +61°C BEAGTAX, ale |ELIGNE BEGIEC CHEBE CALES NAME BEA |EIGHE XEMEERBE O'E'OIE "CA +EEPEAE < #60°EE EBEEBE] to be a |ELIGNE |ELIGNE |ELIGNE BEGIEC BEGIEC ABOUT | BEA |ELIGNE BEGIEC BEGIEVE BEGIEVE BEGIEC BEGIEVE BEGIEV

EKEALAE BEBALE® +EOE TEAE +HE TE OFFICIAL OF BETT OF THE ABOVE



## +ÉÉPÉÃÉ <ÁDªÉÉ ÉŘÉÉŘÉJÁD UÉ®É 52 ÉÉÓ ÉÉÉPABÉE °ÉÉÀÉÉXªÉ ÞÉÐ BÉE DÉŘÉ PĚŘɪÉÉVÉÉXÉ ÀÉÅ+ÉɪÉÉVÉXÉ +ÉvªÉFÉ A ÉAJÉÐÆÉ ÉKÉNNJÉBÉE UÉ®É ÉBÉEA MÁA °ÉÆÉBÉXÉ BÉEÄ AĞЪÉ ÉBÉXNÖ



¶ÉÐE® VÉÉ®BÉEÉA BÉEÉA °ÉÆÉÉBÉÉÉ BÉE®IÉÄ CÄA GÉÉD AXÉ AAÉ ¤ÉÉÐE XÉÄ BÉECÉ ÉBEE MEIÉ ÉEÉKÉÉDÉ ÉTAÇ BÉEA NÉØÉXÉ = tÉÉDE UÉ® MÆÆÉÉÐ SEBÉÉBÉÉAÉÉ BÉEE °ÉÉAÉXÉE BÉE®XÉÄIÉTÉE +ÉÉPTÉ® BÉESSÉÄIÉÐE ¤ÉÉVÉÉ® BÉEĤÉÉ ÉVÉÐ BÉEÆÉXÉÉD XÉÄ +É{ÉXÉÄ °ÉEÉÉD FÉJÉÉA ÁGÁ °ÉTÉGÉÄ- JÉN¶ÉRÆ ÉBEEªÉÉ\*

#6½60°640°1É à à a = { EÉP | lé lé ¶late® véle®bété bété ° catébré lé béte° lé cà géto axé a à e #épet, +évatré a éa | éféré ébén¶le le, +étéré a cabaét ébété ] to xéa été° iebe { Eéle° été® béta ° én° a été béta | étbé +é{éxée +étété® +ététbaébéné ébétaét\*

| EÉBÉBÉLÉBÉE MÉPÉ +ÉÉ® AÃÉ {ÉÉÖVÉEÒBÉEÉ = i {ÉÉNXÉ µÉEÀɶÉ& 2352.71 ÉBÉEBÉAÉXÉ ÀÉÉXÉBÉE PÉXÉÀÉÉÚ® +ÉÉ® 45010 ] XÉ ÉBÉEAÉÉ MÉAÉ\*

ÉIÉQÉEXÉ ÀTA BÉLJÉXÉED UÉ®E BÉL®ÉDÉ 7.93 ÉBÉ.ÀÉÉ.PÉ.ÀÉ./|ÉÉDÉÉÉNXÉ BÉLÉD N® °ÉÄ MÉPÉ BÉLÉ = I (ÉÉNXÉ ÉBÉLªÉE VÉÉ ®CÉ CÈ ÉDÉPÉTÀTÁ °ÉÄ 7.00 ÉBÉ.ÀÉÉ.PÉ.ÀÉ./|ÉÉDÉÉNXÉ BÉLÉD N® °ÉÄ (ÉDÉTALÉ® FÉJÉ °ÉÄ +ÉÉ® 0.93 ÉBÉ.ÀÉÉ. PÉ.ÀÉ./|ÉÉDÉÉNXÉ BÉLÉD N® °ÉÄ ®ÉVɰIÉEXÉ °ÉÄ = I (ÉÉNXÉ ÉBÉLªÉE VÉÉ ®CÉ CĚ MÉPÉTÁ (ÉÉNXÉ BÉLÉD FÉÀÉIÉÉ BÉLÉÄ \*ÉTĀXÉÄ +ÉÉ® +ÉÉDÉÉBÉDÉ +ÉÉDÉ®SÉXÉÉ BÉLÄ ÉBÉTÁLÉÉ, BÉLÉÄ ÉÉÉ BÉLÉÄ ÉÉ VÉÉ ®CÉ CĚ

gtéd réfré xéä ¶fate® véterbétéa bétéa +étréaé <fdaté ébétébé] to uéré Aaé Axé véto {éterétévéxée, °éto réd Aàé à là lé tar i élée ¶faté Méré +év°fa'éxé béta réaé à là bétéd mé<ç {éc aé béta rée à à là vétxébétéréd néd i élée

BELEXÉTÜLLE < °É ÉTÇTVªÉTA ÉABÉLÄPÉÐE TVɰÉ BELEÄ={EBÉE®, CªÉA] ÉÐ+ÉE® ÉÉÉPÉLÖBÉE® +ÉÉÉN BELİÇÍÉ AÉÁ {ɪÉÇÍÉ BÉE® ÉNªÉÉ MɪÉÉ\* < °É ÉTÇTVªÉTABÉLÄCVɰÉ BÉLEÄ1515.46 BÉECÉN °ÇɪÉÄ+ÉE® BÉLÄPÉÐÉ CÉVɰÉ BÉLÄ 3136.07 BÉCTN °ÇɪÉABÉLE BÉE® ÉѪÉE MɪÉÉ\* GÉTÖTÉRÉ XÉĪÉC ÉÉÖ VÉEXBÉLÉCÖNAÍÉA CÄA ÉLÍÉÉTÉ ÉBÉE ªÉC CÀÉÉ® ÉÑÁA ÉCŐÉ MÉÇBÉLEÐÉLÉ CÈÉBÉE AÉMÉLÍÉE® °ÉÉIÉTÁ ÉTÇÉKÉTÁJÉBÉE AÉAÁCÉAÉJÉE {ÉGÉDÉBÉE, ÉÉÉ®ÍÉ



ué®É BÉLÆXÉÉÒ BÉLÉÒ AÉÐÉÉ ÁÉÐÉÉ ÁÉÐ BÉLÉÄÇÉÐ {{ÉhÉÐ XÉCÉÓ BÉLEÐ MÉ<Ç

MÉGÉBÉÇ FINE °ÉA ¶ÉBÉ °ÉAÉÉSÉÉ® °ÉEZÉE BÉE®IÉA CÍA GÉÉD ÉÉÉÉ KÉA VÉÉXÉBÉEÉ®ÉDNÉDÉBÉE BÉELÆXÉÉD(ɪÉÉÇÉ®HÉ (ÉÉÉ®FÉHÉ, °IÉE<ÇÉÉBÉEɰÉ, °ÉBÉÉÉÉ KÉBÉÉÉÉBÉEɰÉ, °ÉBÉÉÉÉÉ BÉÉɰÉÇ IÉAÉ A ÉLE+ÉÇÉKÄA ¶ÉAÉ®VÉÉ®BÉÉÁ +ÉÉ® ±ÉŒÌÉ® °IÉ® (É® °ÉAÉÉVÉ BÉEÄ VÉÉDÉXÉ °IÉ® BÉELÖ °ÉAÉBÉI° BÉÉÄ °ÉBÉÉÄ °ÉBÉÉÄÉÄ BÉEÄ JÉÉBÉ +ÉXÉÉ®IÉ JÉÉBÉÉÉNÉE °CÉDÉÉD CÈ IÉILÉÉ ®ÉÉÇÀªÉ +ÉÉÉ® +ÉLÉ® +ÉLÆÉÉÇÀªÉ AÉBÉÉÁ (É® BÉELÆXÉÉD BÉEÄ BÉE<Ç, JÉÉBÉÉÍ-IÉ (ÉB°BÉÉÉ®É ÉBÉÁÉACÉ NATÉAÉ °) ÁD «XÉÉB?] AÐ BÉEÉ ACO BÉEÉBÉE SÉEÉÖD °ÉÉÉD CÉ ÉVÉÉBÉBÉE ={ÉPÉBÉÁÀ ÁÁÀ °ÉA+ÉÉPÉAÉ «ÁDªÉÉ ÉBÉÉBÉÍ) AÐ BÉEÉÄ 360 ÉDOLÉDOLÉAÉ +ÉÉÉDÇ, JÉNÉXÉ ÉBÉEªÉA MɪÉE\* ÉKÉMÉÉBÉIÉ °ÉÉAÉÉÉNÉBE NÉÉBÉIÉ BÉEÄFÉJÉ ÁÁÀ ÉÐÇ2010 ÀÉAÉBÉEªÉAMɪÉABÉEÉÉÉÉAÉ ÆÉÉBÉE MÉÉÄDXÉ (ÉBÉÉÉBÉE MÉÉÄEÉAÉ +ÉÉDÇ)

gétő réfré xéä réitérété ébét +téréaé <br/>
=ké®nfrétő ékéntébété fkébetéré cérá bétä xétifá °férébétbétéfebe élébetéré<br/>
iélét {fréçérhé {éél®féhé Vértä féjétá {f® bétőkpié ®céű cè iélét <°ébété)

\*\*ELVENÉL+ELA BETER \*\*ELA \*\*EL

BÉLALKÉDBÉLÄKÉMÉLÉGÉLÉ °ÉLALÉTÉNÉBÉL NÉLPÉL É BÉLÉDÉTÉLÉKXÉ ªLÉNÉKÉL+LÉBE
BÉLÄ-LALÉMÉGÉ ÉLÉLÉKXKÉ PLÉBÉLÉBÉL °ÉRILÉKYÉLÁBÉLÉJÉLÉKÉ KÉLÁLÉGÁL, (EÖ LÉBÉLÉJÉA, ALBELÉJÉMÉLÉ LÉBÜLÉKÉLÁBÉLÉJÉLÉ NÉDVÉLÉGÉD
CÖ <°ÉBÉLÄ-LALÉMÉGÉ ÉLÜLÁBÉLÉNZªLÉJBÉLÉJÉBÉLÁ +ÉLÉTÜLÉBÉL °ÉCÁLÍLÉGÉ ENÖVÉLÍLÉGÖ
CÖ <°ÉBÉLÄ-LALÉMÉGÉ ÉLÜLÁBÉLÉNZªLÉJBÉLÉJA°LÉJBÉLÉJÉLÉ +ÉLÉTÉ °ÉLÁLÍLÉGÉ ÉNªLÉ VÉLÍLÉE
CÖLÉLLÉ JÚLÉGÉJA +ÉLÉTÉ | LÉBÉLÉBÜNÉLÉ ÉBÉLÉJAVÉLÉBÉLÉJA \*ÖLÁLÍLÉGÉ ÉNALÉ VÉLÉLÉ
CÖLÉLLÉ JÚLÉGÉJA +ÉLÉTÉ | LÉBÉLÉBÜNÉLÉ BÉLÉJAZÉ ALÁLÍLÉSZÉ +ÉVAFALKE BELÄD BÉLÉÖ °LEKÉLÉKÉ,
NÜBÉLÄÉLÖLÉKKÉ BELEJÉBÜNÉ AÉÁ+LÉK<Ç]ÉÖNÉÄJ® BÉLEÖ °LEKÉKE LÉLLÉE PLÉBÉLÉBÉL A ÉA
BÉLÉBÖNÉ® (ELBÉ® BELE | LÉBÉLÉVÉXKÉ PLÉLBÉLÁÉ CÖ +ÉLPÉLÁLÉ AMDAÉL LÉBÉLÉBÉL A ÉA
BÉLÉBÖNÉ® (ELBÉ® BELE | LÉBÉLÉVÉXKÉ PLÉLBÉLÁÉ CÖ +ÉLPÉLÁLÉ AMDAÉL LÉBÉLÉJÉ BÉLÉ
LÉMÉLÄNKÉ BELEÄLÉVÉXÉ JÉ=XÉPLÉGÖLÉ ÁLÁ ABEL +ÉLDÉGJÉBÉNAÉ BÉLA ÉKÉJÉLÉJÉ BÉLÉ
ALÁLÁ °ÉJÉNÉ NYÉ ÉBELÉÖVÉLÉĞÖ®CÉDCŐ ÉKÉJÉLÉJÉ BELEÄLÉJÉBELÉÄ PLÉDÉ | LÉBÉLÉ BÉL®XÉÄ
BÉLÄ °ÉJÉNÉ °ÉJBÉLÉÖVÉLÉĞÖ®CÉDCŐ ÉKÉJÉLÉJÉ BELEÄLÉJÉBELÉÄ PLÉDÉ | LÉBÉLÉ BEL®XÉÄ
BÉLÄ °ÉJÉNÉ ÖLÉBÉLÖNÉLÉSÖNELÉÖNÉLÉGÖ®CÉDCŐ ÉKÉJÉLÉJÉ BELEÖLÉLÉGÖNÉÉNÉ PLÉLÖLÉJÉNÉ BELEÄKÉTÉLÉSÖNÉ



# ÉÊXNÉDÀÉEC °ÉAÉÉ(ÉXÉ A ÉÆ(ÉÖ°BÉEÉ® ÉÉÉIÉ®hÉ °ÉAÉÉ®ÉEC 2011

| fiafble feq beed effelé + féréaé < 160 afé faithe] to bea féife à dou aféafa foithe + féréaé < 160 aféafa foithe afaith kéife 28 épéifa a 2011 bee an ba afaith kéife 28 épéifa a 2011 bee an ba afaith kéife 28 épéifa a 2011 bee an ba afaith kéife a sa féir a féafa afaith a afaith a afaith a afaith a afaith a afaith a a faith a féafa afaith a afaith a a faith a féafa a afaith a a faith a féafa a a faith a féafa a a faith a féafa a a faith a a faith a a faith a fai



cátőléten vié °cä étététénxé léaténé mér évetetené étxnedbeta lésté»-léatén per eténébet cé éténébet cé éténébet cé éténébet eténébet etén

aévae febeté beta ofe aéra sere una vera beta centrale con aévaet (tobata de le control esta centrale de le control esta control esta centrale de le control esta con



+Éx Éminé a labebnée mélné lego for beléné belénée placo belénée belénée lego belénée belénée lego belénée belénée placo axé belénée placo axé placo belénée belénée belénée placo axé placo belénée 
BÉEÄ +ÉOÉ ÉÉÁÉ BÉEÄ BÉE® BÉEÀÉÁÉÉÅ UÉ®É |ÉnÉxÉ ÉBÉEªÉÉ MɪÉÉ\*

BÉTÉ ÉGÉTÉ BÉTÉ +ÉATÉ AÉA VÉXÉ °ÉATBÉTEÇ ÉÉTÉTÉNÉ BÉTÉ |ÉAÉÖLÉ (VÉXÉ °ÉATBÉTEÇ A ÉATÉRÉ. °ÉAE) |ÉTÉTÉ ÉD GÉTÓ |ÉTAN/ÉTÉ | DAÉTÉ UÉ®É VÉXªÉ ÉÉN YÉÉ{ÉXÉ ÉBÉTÉ\*É MɪÉÉ\*





## ®ÉVÉEÉÉषÉ °ÉàÉÉ®É& 2011 ®EVɰIÉÉÆ {ÉÉ®ÉÉVÉXÉÉ, VÉÉ#ÉÉÉ®



#EÉPÉAÉ < MED PÉÉ ÉBÉÉBÉ] DO BÉEA PÉVÉ PIÉEMÉ {ÉÉBPÉÉN/ÉMÉ BÉÉPÉÉBÉPÉ PÉÉ AÉA | ÉI PÉPÉBÉE É TET, BÉEÉD ÉÉÉBÉE < CÉ PÉÉBPÉEN ÉÉÉD O1 PÉA 15 ÉPÉIÉBÉBP, 2011 IÉBÉE ÉCXNÉD (ÉJÉ TÉVÁ AKÉÉPÉE MÉPÉT < CÉ {ÉJÉTÉVÁ BÉEA PÉENÉD ÉÉÉMÉ DÉFÉNÉ BÉEA ÉCXNÉD +ÉMÉBÉEMÉ UÉPÉ {ÉÉBPÉEN/ÉMÉ BÉEA ÉCXNÉD ÉÉTBÉEMÉBPÉE IÉ BEEA ÉÇÉÉBPÉEA CAÉD | ÉÉBPÉBMÉEAÆ +ÉÉPÉÉBNÉ! BÉEA ÉCKNÉD ÉÉBPÉBPÉEA IÉ IÉ BÉEA ÉÇÉÉBPÉBPÉA CAÉD | ÉÉBPÉPÉBMÉEAÆ +ÉÉPÉÉBNÉ! BÉEA BÉEOMÉ<

15 ÉPÉIÉME® 2011 BÉEÉ ªÉVÉÉÉTÉ PÉAÉÉTÉ BÉEÉ EÉE BÉÉÉ +ÉÉ ªÉÉVÉXÉ ÉBÉEªÉÉ MɪÉÉ\* <°É °ÉAÉÉTÉ à AÉA AÉD ªÉ +ÉÉBÉÉTÉ BÉEA °ÓÉ AÉA DÉD °ÉBÉXÉ ÉBÉE°ÉÉ |ÉÉAÉEAÉ® ÉBENÉD ={ÉÉPIÉI IÉÉO GÉÉDA. AXÉ. ¤É°Ó+ÉÉ, °ÉAÉD ÀÉCÉ|ɤMÉBÉE (Œ. {É.) XÉA°ÉAÉÉTÉ BÉEÉD+ÉVªÉFÉIÉÉ BÉEÉD GÉÉD|ɶÉMÉ ¤É®EÉBÉEIÉÉD ÀÉD ªÉ |ɤMÉBÉE (|ɶÉE. A ÉABÉE. °ÉA) ÀÉMEɰÉÉDÉ IÉA GÉÉDXÉGÉTÉTÉ BÉEÉ ¶ÉÉBÉÉ (IɶÉÉ. A ÉABÉE. °ÉA) ÀÉMEɰÉÉDÉ BÉEEªÉTÉ\* BÉEɪÇÉEÀÉ BÉEAÉ BÉEAÉÉ ÉE AÉAÀÉMÉ {É® ÉÉÉTÉVÉAÉÉXÉ ÀÉD ªÉ +ÉÉBÉÉTÉ DÉD. °ÉBÉXÉ ÉBÉE°ÉÉ, GÉÉDA AXÉ ¤É°Ó+ÉÉ, °ÉAÉD ÀÉCÉ|ɤMÉBÉE (®É. {É.) IÉIÉÉ GÉÉD|ɶÉÉMÉ ¤É®ÉÉBÉEIÉÉD ÀÉD ªÉ |ɤÉBÉÉ (|ɶÉE. A ÉABÉE. °ÉA) BÉEÉ {ÉBE MÉÖU BÉEÀ °ÉÉIÉ °ÉÉMÉIÉ ÉBÉEªÉÉ MɰÉÉ\*

iti(f¶Stéità °t®° fitéd àtéabeted | tébéate beteà àtd'é +tébébé, di téé° ét A fagtéd A Axé \*f° ó+té, °éàfde àtcé|téabete (°E. {E.) ute àtéa° ététébé lébéate mate mait ille néve | tvv étàtie bete = xébete ¶fütétatotép | té(it ébéate mait ille néve | tvv étàtie bete = xébete ¶fütétatotép | té(it ébéate mait ille néve | té, °éàfde àtcé|téabete (°E. {E.) xéa° ététénée àtà = {tép | tile \*fbirvétébété étà bétéà °éàfde àtà bété cile se sata texnéd bete «fvététate texnédbete bete étégéate beta béta bétéàbétevé àtà bété{tetd = xxéébé còc cè àtébétxé + tétéd iebét \*coé °ééd °ééd °émét fxéé Az cè + tée càtà texnéd béta jéatebé bétéà bétéà bétéaté àtà vaténé °éà vaténé | tá témé béte bétéà bétéàté àtà vaténé °éà vaténé | tá témé béte béte cè cè cè cè de la league de la la league de la la league de la la league de la la la league de la la la la league

aéDªE +EEBEEDE bei, °EÖEXE EEE°CÉE XEA CAEE®A NAJE AÉA EEXNEÓ EÉN ɰE, EEXNEÓ °EÇIÉEC, EEXNEÓ EÉJÉE ÉEXNEÓ EÉJÉE ÉEXNEÓ EÉJÉE ÉEXNEÓ EÉJÉE ÉEXNEÓ EÉJÉE ÉEXNEÓ EÉJÉE ÉÉXNEÓ EÉJÉE ÉÉXNEÓ EÉJÉE ÉÉXNEÓ EÉJÉE ÉÉXNEÓ EÉJÉE ÉÉXNEÓ EÉJÉE ÉÉXNEÓ EÉJÉE A\* BEDEÉBEE ªÉC +ÉÉAÉVÉXE BEEÓ EÉÉTÉ Cè =XCÉXÍE BÉECÉ ÉBÉE ÉEXNEÓ BÉEÉ VÉTÁ °ÉÀÀÉEXÉ IÉJÉE °IÉ® ÉBÉAÉXÉE EÉXNEÓ BÉEÁ VÉTÁ °ÉÀÀÉEXÉ IÉJÉE °IÉ® ÉBÉAÉXÉE SÉÉÉD A ÉC +ÉTÉ IÉBEE =°ÉA | EÉJÉE XÉCÉÓ CÉA {ÉɪÉE CÈ +ÉÉJÉAÉ <ÁDªÉE ÉBÉEBÉ] AD BEEÓ ªEVɰ IÉJÉXÉ {ÉÉBÉÉNÉKÉ BÉEÁ ÉBÉÉDÉXXÉ ÉÉJÉEÉMÉA ÀÉA ÉEXNEÓ BÉEA FÉJÉ ÁFÁ CÉA ®CÓ IÉMÉÉBÉ {É® | ɰEXXÉIÉE +ÉÉBÉBªEBEDE BEEÓ IÉJÉÉ ÉÉÉÉE ÆZ BÉEA ÉBÉAÁ NÉÓBÉEBÉAÉNÉAAFNEÓ

Ecxned (EJE TELVA BELA neffxé + EE AEGOVE EE EE CXXÉ | EEGE AEGOVE EE COME EE

+ÉME à là gétû | ɶÉME ±É®ÉEÉBÉEIÉÉÒ à ÉÖ ªÉ | ɱÉMEBÉE (| ɶÉÉ. A ÉMBÉE. °ÉM) BÉTA VÉXªÉ ÉTO YÉTÉÉXÉ BÉTA °ÉÉTÉ CÉÖ °ÉAÉTɰÉTC BÉTÉ °ÉAÉTÉÉXÉ CÖÉÉ\*



## ÉCXNÉD àÉÉC °É àÉÉ {ÉXÉ A ÉA®É VÉ ÉÉ TÉ BÉÉÉ ªÉ GÉÉ BÉÉÉ +ÉÉ ªÉÉ VÉXÉ, {É a ÉÉ < xÉ àÉ D ªÉ āÉ ªÉ, MÉÖÉ CÉ ] ÉD



+tertae <ndoate tatebel do, {te<(tate<xt ato) atate, medece] to utae ato ate etcetae | totae |

°ÉâÉÉ®ÉÉC BÉEÉÒ+ÉvªÉFÉIÉÉ {ÉÉ<{ÉâÉÉ<xÉ àÉÖªÉÉāɪÉ BÉEÄàÉCÉ|ɤÁÉBÉE
gÉÉÒ näÉYÉIÉ {ÉEBÉEXÉ xÉÄ BÉEÉÒ =xcÉxÉä +É{ÉxÉä £ÉɬMÉ àÉÀ BÉEɪÉÉBɪÉ BÉEÉÒ
={ÉãÉɆvɪÉÉÀ BÉEĪÉ®à àÉå #ÍIÉÉIÉÄ CÄA BÉECÉ CèÉBÉE ®ÉVÉÉÉÉ BÉEɪÉÉBÇ ÉªÉXÉ
àÉÀ = iBÉEB BÉEɪÉÇ CåÉÖ +ÉÉPÉÄÉ |ÉrÉxBÉXÉ UÉ®É ãÉMÉÉIÉÉ® +ÉÉ~ ɬTÉǰÉÄ

{ÉÉ<{ÉãÉE<xÉ àÉÖªÉÉãɪÉ BÉEÉã|ÉIÉàÉ ®ÉVÉEÉFAÉ ¶ÉEÐÓ °Éã°ÉààÉÉÉRÉIÉ BÉE® ®cé cệ xé®ébété°é(={éµétàé), MéÖtécé]é0 ué®é A éA ®éVétété¤é élététémé, MÉRC àÉAFÉTÉAÉ<sup>a</sup>É, EÉÉ®IÉ °É®BEEÉ® UÉ®E EÉÉD {ÉÉ<{ÉAÉÉ<XÉ BÉEÉÄ |ÉIÉàÉ ®ÉVÉEÉÉTAÉ ¶ÉÉÐIÐ °ÉÐ °ÉÐ °ÉÐ SÁ SÉÉÉKÉ Í ÉBÉE °ÉÉ MÉ °ÉÉ = x CÉRÉÐ +É{ÉXÉÐ nŘÉÉK NXÉ BÉEɰÉC à Là ®ÉVÉFÉÉ पर्ह ÉÉcxnÉÒ BÉEÉ à V°ÉÉNÉ °É à V°ÉÉNÉ |ɰÉÉMÉ à Là ãÉÉxÉ à CâÉÖ °ÉEÉÉÒ+ÉÉÐÉBÉEÉ®ÉÒ A ÉÆBÉEBÁGSÉÉÉ®ÉÉB °ÉB+É{ÉÉÐÉ BÉEÉÒ\* °ÉBÉÉ®ÉIC BÉEB BÉÜ JªÉ +ÉÉBÉÉBÉ DÉI +ÉSªÉÖÉ ¶ÉBÉÉÇXÉBBÉECÉ ÉBÉE BªÉÉBÉDÉ BÉEBÉÉÉBÉEɰÉ AÉBÉÉÉTÉ BÉEÉ àÉci É{ÉbÉC ªÉEMENÉXÉ ®ciÉÉ cĕ <°ÉÉBÉA ÉÉÉTE BÉEÉ YÉÉXÉ CÉTÁÉ +ÉiªÉXiÉ Vɰő®ÉD CĚ =xcÉåÉä ªÉc £ÉÉD BÉECÉ ÉBÉE ¤ÉnãÉIÉÉD CÖC {ÉÉ®ÉP IÉÉBɪÉÉÅ BÉEÄ °ÉLIÉ CÀÉÅSÉĀÉXÉÉ SÉÉÉCA\* =xcéxéä<°É ¤ÉLIÉ {É® VÉÉ® ÉhªÉÉ ÉBÉE °ÉIÉAÉ EÉÉ®IÉ BÉEÄXÉEMÉÉ®BÉE BÉEİÓJÉ ÀÉÁ®ÉVÉEÉÉFÉ ÉÉXNÉÓBEEÉ ={ɪÉMÉ BÉE®BÉEÄCÀÉÁ +É(Exfa @fuziói Belilba Bell like elle Bell sellica\* ofategic afalellandu +ÉÉBÉÉBÉ BÉEB °ÓJÉ ÀÉB ={ÉÉPIÉIÉ QÉÉD+ɶÉBÉE BÉBAÉÉ® ÉBÉGÉ VÉÉD XÉB BÉECÉ ÉBÉE +ÉEVÉ BÉEä <°É BÉEà{ªÉQ ® ªÉQÉ àÉå ªÉGKÉBÉEEÍD BÉEÄ VÉÉ®A ÉÉcxnÉO BÉEÉ BÉEÉAÉ +ÉɰÉÉXÉÉÓ°ÉBBÉE® °ÉBÉEIÉÄCÐ <°ÉBÉEBÉÐÉA ÉÐÉ{ÉEC<SUÉ ¶ÉÉBÉÐÉ BÉEEÓ +ÉÉ É¶ªÉBÉE IÉÉ CĒ GÉÉÚ®-ÉÉÀP BÉBÀÉÉ® IÉÉÁÉBÉENÉ®, ÀÉÜJªÉ |É×ÉÆÉBÉE(|ɶÉɰÉXÉ) BÉEä ¤ÉÉ®à àÉå ={ÉÉP | ÉiÉ °É£ÉÉD °ÉVVÉxÉÉÅ BÉEÉÄ +É ÉMÉIÉ BÉɮɪÉÉ\*

<°É°Éä{EÚÉÇÉÎNXÉEMEE 12.09.2011 BÉEÉä{ÉÉ<{ÉāÉÉ<XÉ àÉÜ ªÉÉāɪÉ àÉà
ABÉE Éħ ɰÉÉÐÉ ªÉVÉEÉÉTÉ BÉEɪɶÉÉĀÉÉ BÉEÉ ÉÉÉÙ°É{ÉEĀÉİÉÉ{ÉÚÉBÉE +ÉɪÉÉNÉXÉ
ÉBÉEªÉÉ MɪÉÉ\*</pre>

## (té<{táté<xé àt0ªtfátªt °Éc»ttth ®tvzh0t ®tVtftttat ¶tt0b °ta°tààtttktit



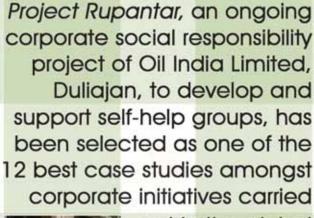




# PROJECT RUPANTAR













out in the global oil and gas industry. The project will





be showcased at the World Petroleum Conference Social Responsibility Global Village to be held as part of the



World Petroleum Conference at Doha, Qatar, from December 4 to 8, 2011.

