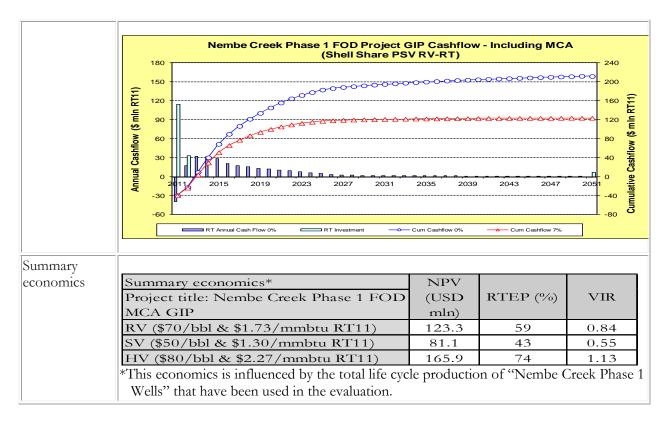
# **Group Investment Proposal**

# **Summary Information**

Business unit and company	Shell Petrole	um Devel	opment	Compar	ny of Ni	geria Lin	nited (SPE	DC)		
Group equity interest	100% in SPI JV with a 30			C is the J	oint Ve	nture (JV	) operator	r of an u	nincorp	orated
Other shareholders / partners	Nigerian Na and Nigerian				,		%), Total E	E&P Nig	eria Ltd	(10%),
Business	Upstream In	stream International (UI)								
Amount	The headline CAPEX She approval in toproposal and The total corus US\$69.87 ml	ell Share M his revised US\$70.42 mmitment	MOD and GIP. 72 mln be	nd US\$1 This is making requal	.5 mln nade up ested fo \$151.55	OPEX of US\$8 or in this	Shell Shar 1.13 mln: proposal. up of She	e is bei approve	ng requ d in the	ested for previous
Project	Nembe Cree	k 'D' Sanc	ls Furth	er Oil D	evelopn	nent (FO	D) Phase	1		
Main commitments	50/50 MOD	100%	JV (\$'mln) M	OD_Previous I	p		Shell Share (	\$'mln) MOD_I	Revised IP	
	Description	Previous IP_JV under MCA Funding	Incremental IP Request_JV Funding	Incremental IP Request_ MCA Funding	Total IP	Shell Share MCA_Previous IP	Shell Share MCA_Incremental IP	Shell Share_Equity	Shell Share_MCA	Total Shell Share
	Flowline & Hookups	22.05	-	9.75	31.80	14.70	6.50	9.54	11.66	21.20
	Facilities	4.05	-	-	4.05	2.70	-	1.21	1.48	2.70
	Wells	95.60	-	84.20	179.80	63.73	56.13	53.94	65.93	119.87
	PMT	-	5.15	-	5.15	-	1.55	1.55	-	1.55
	Contingency	-		7.11	7.11	-	4.74	2.13	2.61	4.74
	Total CAPEX	121.70	5.15	101.06	227.91	81.13	68.92	68.37	81.68	150.05
	SCD (OPEX)	-	5.00	404.04	5.00	-	1.50	1.50	-	1.50
	Total Cost	121.70	10.15	101.06	232.91	81.13	70.42	69.87	81.68	151.55
Reserves/ Resources	This project truncated 2F and transfers Developed in addition, 0.2 31.12.2010).	reserves ing equiva n 2012 wit	of 26.8 dent SE th positi	MMstb C Prove ve impa	of oil a d reserv ct on SI	nd 0.27 res of 13 PDC DD	bln sm3 c MMstb (S &A (Ref	of gas (S SS) from HCM ta	S) to pr PUD to ble attac	oduction o Proved ched). In
Production	Incremental production of the effective to NLNG.	of 9.7 MM	Iscf/d (	8.2 Mbc	pd and	2.8 MM	scf/d SS)	by 2013	3 thus is	ncreasing
Source and form of financing	reference Gincluding N generated fu	This investment will be financed through the agreed MCA funding for NCTL Bundle, reference GFP approved by the RDS Board on 22.07.2008. Total Shell commitments, including NNPC carry under the MCA, will be financed with SPDC Limited own renerated funds and existing intra-group facilities. The MCA terms do not include PMT CAPEX and all OPEX related expenditures.								



## Section 1: The proposal (Management Summary)

This revised Group Investment Proposal (GIP) seeks support/approval for funding of US\$70.42 mln Shell equity Share MOD and already approved additional investment of US\$81.13 million as NNPC carry under MCA to execute the Nembe Creek D sands Further Oil Development (FOD) phase 1 (NEMC phase 1) project.

The GIP update is necessitated by: the change in funding mechanism from Shell Equity share only to Shell Equity plus NNPC carry under MCA arrangement, project cost increase resulting from higher than anticipated rig and materials cost, re-categorisation of the cost based on MCA guidelines and also the need to re-run the economics.

Nembe Creek Field is the largest oil field in the Western Swamp area of SPDC East with expectation STOIIP of 2832.3 MMstb and Expectation Ultimate Recovery(100%) of 1401.5 MMstb (reference NNS ARPR 31/12/2010). The cumulative production as at 31/12/2010 was 679.5MMstb of oil.

The NEMC phase 1 project aims to drill and complete 8 wells, install flowlines and hook-up wells to existing flowstations, construct/install Remote Field Manifold and Bulk /Test lines. Nembe Creek field has AG gathering infrastructure in-place. There is export/pipeline ullage to deliver the produced gas to the Soku Gas Plant. The produced water will be disposed of at the Bonny Terminal. The total liquid processing capacity of the 4 existing flow stations in Nembe Creek Field is 180 Mbpd. Crude is evacuated from the field via the new Nembe Creek Trunk Line (NCTL).

Drilling operations started in August 2011 with Lonestar 203 rig, based on the signed August 2011 Short-Term Drilling and Workover Sequence. The first oil is expected in December 2011. A second rig string (Lonestar 204) started operations in September 2011.

The previously approved JV 100% funding of US\$121.70 mln (shown in Table under main commitments on page 1) was to drill 8 oil producers (7 horizontal & 1 conventional) in Nembe Creek field in 2007. The 2007 IP economics returned an NPV (7%) of \$72.1 mln at a Project Ranking Value (PRV) of \$40/bbl, compared to the current evaluation in this revised IP, of \$123.3 mln NPV (7%) at a higher PRV of \$70/bbl (ref. Summary Economics section, Table 2) against the background of a different cost profile.

### Section 2: Value proposition and strategic and financial context

- This project is aligned with SPDC's strategic goals and priorities by maturing economic truncated 2P reserves of 26.8 MMstb of oil and 0.27 bln sm3 of gas (SS) to production and transferring equivalent SEC Proved reserves of 13 MMstb (SS) from PUD to Proved Developed in 2012 with positive impact on SPDC DD&A (Ref HCM table attached). In addition 0.26 MMstb PUD associated with MCA had been booked in 2010 (Ref 31.12.2010).
- Incremental oil production, peaking at 27.3 Mbopd by 2013, thus increasing the effective utilization of the new NCTL pipeline and contributing 9.7 MMscf/d to SPDC's gas supply to NLNG. This optimizes further the use of existing Right of Way (RoW) and facilities thereby lowering Unit Technical Cost (UTC) of development and minimizing the footprint.

## Cost Increase/Market Situation

Costs have escalated from the last IP approval from US\$121.70 mln to US\$232.91 mln due mainly to increase in rig rates, design changes and facilities cost. The chart below reflects details of the key changes.

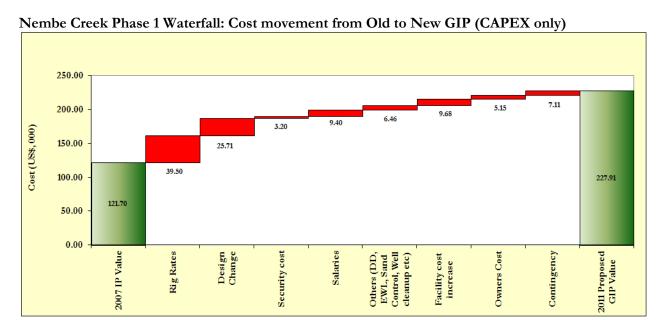


Table 1: NEMC Phase 1 project Cost Phasing MOD 100% JV and Shell Share

NEMC P50 Estimate & Expenditure Phasi	ng															
				JV Fur	nded				MCA Funded					PROJECT		
	2007	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	TOTAL
Facilities	-				-	-			1.00	-	-	30.33	8.36	-	-	39.69
PMT		-			3.86	1.29	1	-	-	-	-			-	-	5.15
Wells	1	-		-	-	-	1	-	-	-	-	134.42	41.54	-	-	175.96
Contingency	-								-	-	-	5.33	1.78	-	-	7.11
OPEX (SCD)	1	1			3.00	2.00	ı	-		1	-					5.00
100% CAPEX Phasing	0				3.86	1.29	-	-	1.00			170.08	51.68	-	-	227.91
100% Cost Phasing	0	0			6.86	3.29	0	0	1.00	-	-	170.08	51.68	-	-	232.91
Years / Phasing (Shell Share)	2007	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	PROJECT TOTAL
JV_Cost Phasing (Shell Share)_CAPEX	0				1.16	0.39	-	-	0.30	-	-	51.02	15.50	-	-	68.37
JV_Cost Phasing (Shell Share)_OPEX	0	0.00			0.90	0.60	-	-								1.50
Total JV_Cost Phasing	0	0.00			2.06	0.987	-	-	0.30	-	-	51.02	15.50	-	-	69.87
MCA_Cost Phasing (Shell Share)_CAPEX									0.37	-	-	62.36	18.95	-	-	81.68
Total Shell Share_JV & MCA	0			0	2.06	0.99	0.00	0.00	0.67			113.39	34.45	0.00	0.00	151.55

## **Summary Economics:**

The base case economics was evaluated on a forward-look basis and assumes that Shell will fund its NNPC share of the Carry (MCA) component of the costs and its Equity share of the project costs. The Project Management (PMT) CAPEX and Social Performance OPEX are excluded from MCA funding (treated as JV cost) as they were not originally part of the carry costs under the agreement. The 100%

Capex phasing (including Social Performance Opex of US\$5 mln) at 50/50 MOD estimate is shown in Table 1:

The headline number covers the CAPEX and OPEX Shell share, under JV funding required for the project execution, and the Shell share of the NNPC portion of the project cost, bringing total Shell share of the project cost to approximately 65% of the SPDC JV 100% cost of US\$232.91mln. Sensitivities evaluated include:

- High CAPEX
- 1yr Schedule delay
- Full Life Cycle
- PIB House Version
- High & Low reserves
- Concession expiration in 2019
- 1.5% cost mark up as provision for costs dispute by NNPC.

The impact of earlier expenditure (\$1mln 100% JV MOD) on the base case economics is shown under the Full Life Cycle sensitivities. The tornado plot is shown in Figure 1 while details of the evaluation results are shown in the economics grid in Table 2.

Table 2: Upstream Economic Grid of Nembe Creek 'D' Sands FOD Phase 1

PV Reference Date: 1/7/2011	NPV (S	/S \$ mln)	VIR	RTEP	UTC (RT \$/boe		Payout-Time (RT)_0%	Maximum Exposure (RT)
Cash flow forward from: 1/1/2011	0%	7%	7%	%	0%	7%		
Base Case + MCA						,		
SV (\$50/bbl & \$1.30/mmbtu RT11)	143.3	81.1	0.55	43	8	10		
RV (\$70/bbl & \$1.73/mmbtu RT11)	211.2	123.3	0.84	59	8	10	2013	\$40.0mln in 2011
HV (\$90/bbl & \$2.27/mmbtu RT11)	280.0	165.9	1.13	74	8	10		
Oil BEP (RT \$/bbl)						8.44		
Sensitivities (using RV)								
High CAPEX (P90)		120.6	0.69				2014	\$48.6mln in 2011
High Reserves		136.8	0.93				2013	\$31.8mln in 2011
Low Reserves		43.5	0.30				2015	\$43.5mln in 2012
1-Yr Production Schedule Delay		114.2	0.78				2014	\$47.4mln in 2012
Concession Expiration (2019)		92.9	0.63				2013	\$40.0mln in 2011
Full Life Cycle (Capex - \$1.0mln MOD 100%)		123.0	0.84				2013	\$40.3mln in 2011
1.5% cost markup due to BVA issues		118.3	0.79					
PIB House_v12		146.7	1.00					

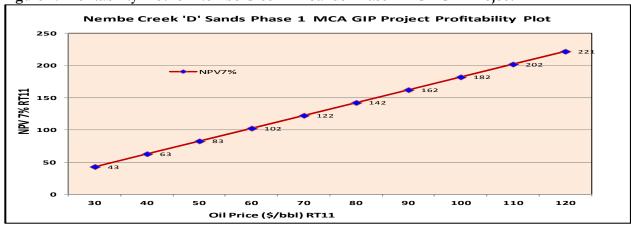
Key Project Parameter Data Ranges (Shell Share)

Parameter	Unit	BP10 Provision	Low	Mid	High	Comments
Capex (MOD)	US\$ mln	149.39	133.45	149.39	1/9.13	Incremental CAPEX under MCA Funding of \$81.38mln and JV Funding of \$68.01mln. Full Life Cycle cost of \$151.55mln made up by JV Funding of \$68.37mln and MCA of \$81.68mln.
Opex (MOD)_Project	US\$ mln	1.50	1.34	1.50		Incremental project OPEX under JV Funding.
Production Volume	mln boe	28.82	12.01	28.82	28.98	Production volume forecast till end of field life
Start Up Date	mm/yy	Aug-11	Aug-12	Aug-11	Aug-11	Base re-start Up production
Production in first 12 months	mln boe			1.5		Production vloume from Aug '11 to July '12

Nembe 'Sands' Phase 1 FOD Project GIP NPV 7% (\$ mln) - Shell Share RT11 60 140 180 n 20 40 ឧก 100 120 160 220 200 Reserves (Low/High) Onstream Date ( - 1 Yr / Base) CAPEX (P90 / P10) OPEX (P90 / P10)

Figure 1: Tornado Plot for Nembe Creek Sands Phase 1 Project GIP

Figure 2: Profitability Plot for Nembe Creek 'D' Sands Phase 1 MCA GIP Project



# **Key Economic Assumptions:**

- AGFA fiscal treatment applied.
- Gas Supply to NLNG T1-6 assumed Gas Sales Price \$1.73/mmbtu at PSV RV-RT in 2011.
- Gross Heating Value (GHV) of 1,150 btu/scf applied.
- ARPR OPEX as at 31/12/2010 (for 2011) was applied in addition to project Social Performance OPEX.
- AG Gas Sales Assumption is 87% of AG Produced
- NDDC Levy of 3% of total expenditure excluding flare penalty
- Education Tax of 2% assessable profit
- Flare penalty of \$3.5/Mscf applied.
- Water treatment cost at \$0.50/bbl applied.
- 10% of total project RT CAPEX assumed as abandonment cost

#### MCA assumptions:

- All costs over the MCA ceiling would be recovered through cost oil.
- Project management costs were not included among the carried cost.
- MCA treatment is unchanged under PIB fiscal regime
- Profit oil ceiling of 8% IRR on carried costs

## PIB assumptions:

• NHT depreciation schedule is 4 x 20%, 19% for qualifying expenditure.

- CIT depreciation schedule is 3 x 25%, 24%, for qualifying expenditure.
- Royalty rates based on product (value) prices and production rates per PML (assumed equal to a field).
- Education tax calculated as 2% of its assessable profit and it is not deductible for CIT, but deductible for NHT.
- NDDC levy calculated as 3% of expenditure
- Withholding tax is applicable at a rate of 7.5% for IAT version but not for the alternate version
- 20% of overseas cost is non-deductible for determination of NHT taxable income
- NHT rate is 50% for onshore and shallow water, and 30% for frontier acreages and Deep Water.
- CIT is 30% of taxable income and is not deductible from NHT
- Recovery in MCA for JV has been assumed for PIB
- Nembe is an existing field hence no production allowance is applicable.

# Section 3: Risks, Opportunities and Alternatives

## Key risks, Mitigation & Opportunities include

The principal risks associated with this proposal, key mitigation measures and opportunities are as follows:

### 3.1 Risks

#### • Funding:

There is the risk that project value to Shell will be eroded if the MCA-approved cost estimate is exceeded. There is also the risk that costs above the approved cost estimate may not be approved by NNPC and therefore become a Shell exclusive charge.

*Mitigation:* Project would be executed based on approved budget. Partners will be engaged early enough where there is variation. Lateral learning from other projects will be implemented to avoid cost overrun.

## Community and Enabling Environment (Security, Sabotage, Political Environment):

Hostage taking, existence of militant groups and (heightened) threat of insurgence are current realities in the Niger Delta especially in the swamp which could threaten project execution. *Mitigation:* General Memorandum of Understanding (GMoU) has been signed with the community and 2% of the total project cost will be used for Community project. With improvements in the Niger Delta security following the Amnesty programme, it is envisaged that there will be a reduction in community related NPT, although it is still perceived that a safe and secure environment relies on the presence of the government security outfit in the area. Existing Nembe Creek field project specific site security plan is in place and will be reviewed with Corporate Security through the appropriate Area Security Advisors with any amendments approved by Head Security Operations East. Specific threats will be managed through the Security & Surveillance Centre (SIS) and communicated in good time to those that need to "Know" and "act".

#### HSE

The project is being executed under challenging circumstances in the Niger Delta Eastern Swamp. *Mitigation:* HSE adviser has been assigned to the project and sustainable HSE-MS culture will be embedded during the execution of the project.

#### Cost Overrun:

Increase in the rig cost as a result of non-productive time while drilling, escalated materials costs and Security.

Mitigation: The well and facility cost have been updated to reflect current reality. Lateral learning from the completed Santa Barbara and Soku wells will be incorporated into the project and a focused Development Well Delivery Team with Well Engineering will continue to manage the activities.

## • Early Water Breakthrough

Early water breakthrough from new wells resulting in reduced incremental oil recovery.

*Mitigation:* The wells will be optimally placed as possible to reduce the risk of water breakthrough. Learning from the previous wells drilled will be incorporated. Data from permanent down-hole gauges will allow real-time reservoir surveillance to optimize the individual well off-takes.

## • Risk around unapproved incremental MCA Costs

There is a risk that un-approved MCA costs would be disallowed for tax deductions by the FIRS. *Mitigation:* Upstream Commercial Finance would re-negotiate and ensure that incremental costs are approved by NNPC.

## 3.2 Opportunities

#### • Resources

All the critical positions required to deliver the project have been fully resourced. Development Swamp Asset East (DSSE) Field Development and Execution Team will support the project execution. Engineering support will be provided by both major and Asset Engineering Teams.

#### • Project support:

Project strongly supports the new oil production and would partly arrest the decline in oil production. The phase 1 wells will be used to acquire more data to help firm up the development proposals of Nembe Creek Phase 2 FDP which will further develop the D sand reservoirs and improve recovery.

## Knowledge Sharing

This project will provide a very good opportunity for the new well-site PEs to have requisite operations experience under the close supervision of their senior PEs and SDEs

#### 3.3 Alternatives

There are no alternatives to drilling these wells to develop the reserves given in this proposal.

## Section 4: Carbon Management

The main impact on Green House Gas (GHG) emission resulting from the hookup of additional production into the existing surface facilities have been addressed by the GHG and Energy Management Plan (EMP) for the facilities. The GHG/EMP also contains the 10 years GHG emission and Energy use forecast for the facilities together with a number of recommended abatement proposals. Some of these proposals have now been fully implemented. With the Gas booster compressors in Nembe Creek-1 & 2 flow stations fully operational and Nembe Creek-3 & 4 flow stations up and running by end 2011, emission from flaring will be largely eliminated.

#### Section 5: Corporate structure, and governance

This proposal is within the SPDC corporate structure and governance framework.

## Section 6: Functional Support and consistency with Group and Business Standards

This proposal and the execution of the project are consistent with the Group Business standards. Functional support for this proposal has been provided by Technical, Finance, Legal, Treasury, Contracting/Procurement, Social Performance and Tax functions.

## Section 7: Project Management, Monitoring and Review

The execution of the project is managed through the DSSE Field Development & Execution Team, Wells and Engineering Hub Teams in line with the SPDC organizational model. Following successful completion, the wells will be handed back to the Swamp East Production Operations Team. There will be regular progress report of the well delivery activities to Asset Development Manager, the Development General Manager and to the JV Partners. All significant reviews and follow up actions had been done in the Development and Engineering Teams. Details of the ORP review gates are shown below:

DG3 approval in December 2005

VAR4/DG4 July/November 2006

Spud date: July 2011.

On-Stream Date: August 2011.

### Section 8: Budget provision

This project has budget cover and is included in BP10 and BP11 as well as the 2011/12 JV Programme. Though the revised Investment Proposal is in line with capital expenditure allocated to the Nembe Creek phase-1 project in the business plan, there is increase of US\$ 24.36 mln (100%) when compared to the costs in the 2008 MCA agreement. The shortfall in the JV funded cost is US\$10.15 mln mainly due to PMT cost and SCD Opex. In line with MCA agreement, NAPIMS will be engaged on the cost increase in order to reach an agreement on how to fund the additional cost.

# Section 9: Group financial reporting impact

The financial impact of this proposal on Shell Group financial is as outlined in the Table below:

US\$ mln	<b>Prior Years</b>	2011	2012	2013	2014	2015	Post 2015
Total Commitment	0.67	115.44	35.44	0.00	0.00	0.00	0.00
Cash Flow							
SCD Expenditure	0.00	0.90	0.60	0.00	0.00	0.00	0.00
Capital Expenditure	0.67	114.54	34.84	0.00	0.00	0.00	0.00
Operating Expenditure	0.00	2.64	4.65	4.93	4.79	4.73	65.09
Cash Flow from Operations	0.17	20.69	41.04	47.96	47.78	46.34	197.51
Cash Surplus/(Deficit)	(0.50)	(93.86)	6.20	47.96	47.78	46.34	197.51
Profit and Loss							
NIBIAT +/-	0.03	6.64	20.32	21.33	20.25	19.81	169.09
Balance Sheet							
Average Capital Employed	0.80	69.89	161.20	170.10	149.17	133.39	341.75

#### Section 10: Disclosure

Material disclosures, if any, will be done in line with the Group Disclosure Guidelines.

## Section 11: Financing

Both SPDC's direct share of expenditure and its contribution to NNPC's share will be funded from SPDC's own cash flow and existing intra-group facilities.

## Section 12: Taxation

MCA fiscal arrangements are acceptable to the Tax authorities, provided their sign off is obtained before implementation.

#### Section 13: Key Parameters

The following are the main aspects of this proposal:

Approval for the total revised headline size of US\$151.55 mln Shell Share 50/50 MOD. This is made up of Shell Equity contribution of US\$69.87 mln and MCA contribution of US\$81.68mln.

# Section 14: Signatures

This Proposal is submitted to the ECMB for approval.

Supported	by:	For shareholder approval:
Maarten W	etselaar (FUI)	Malcolm Brinded (ECMB)
Date/	./	Date/
Initiator:	Bayo Ojulari (UIG/T/D)	Date: 14/11/2011

# Lifecycle HCM Forecast Sheet

Nembe Creek Phase 1 Project Location & Country Version 2.0

Project No.: SPDC-11-2582

Mandatory for Upstream and mandatory for Exploration, Development and NBD projects  $\geq$  US\$ 100 mln SS, but strongly recommended for all projects < 100 mln US\$

OIL NGL	Date	2U Prospective Resources		2C Contingent PRMS 2P Res Resources Additions Addition			ves	SEC Proved Reserves Additions	
[min bbi]	(mm)-yy		Dev.	Dev.	Undeveloped		Developed	Undev	Developed
DG/Key event		Prospect	Pending Post-DG1	Pending Post-DG2	Post DG3	Post-DG4	Developed	Olido.	Bettelepes
DG 2	Oct-05			26.8					
DG 3	Dec-05			-26.8	26.8				
FID	Jul-06			W. C. W. C.	-26.8	26.8		13.0	
First HC	2011	-		-		26.8	26.8	-13.0	13.0
1131110	2012								0.0
	2013					Transfer			0.0
	2014								0.0
Perf Update	2015								6.8
on opacio	2016								0.0
	2017							· ·	0.0
Perf Update	2018								4.0
	2019							-	0.0
Perf Update	2020						1000		0.0
	2021		1						2.9
	2022								0.0
Perf Update	2023					-	-		0.2
	2024								0.0
	2025					-			0.0
	2026				-				0.0
	2027				1	1			0.0
	2028				-	-			0.0
later years	1			1	0.0	0.0	26.8	0.0	26.8
Total		0.0	0.0	0.0	0.0	Ų.U	20.0	0.0	

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OIL/NGL [bln sm3]			Dev.	Dev. Pending	Undeveloped		Developed	Undev	Developed
		Prospect	Pending Post-DG1		Post DG3	Post-DG4	Developed	Ondev	Developed
ARPR 31.12.2009	before last					30.3		13.0	
ARPR 31.12.2010	last					30.3		18.3	

GAS	Date	2U Prospective		itingent Additions	PR	MS 2P Reser Additions	ves	SEC Proved Reserves Additions		
[bin sm3]			Dev.	Dev.	Undev	eloped	Developed	Undev	Developed	
DG/Key event	(mm)-yy	Prospect	Pending Post-DG1	Pending Post-DG2	Post DG3	Post-DG4	Developed		Deteloped	
DG 2	Oct-05			0.27						
DG 3	Dec-05		CAT.	-0.27	0.27					
FID	Jul-06				-0.27	0.27		0.20		
								-0.20	0.20	
First HC	2011					-0.27	0.27	-0.20	0.00	
	2012						-		0.00	
	2013				-				0.00	
	2014				-		-		0.00	
	2015						-		0.00	
	2016				-			_	0.00	
	2017								0.00	
	2018			-			-		0.04	
	2019					-	-	-	0.00	
	2020			-	-		-		0.00	
	2021			-	_		-		0.03	
	2022					-	-		0.00	
	2023			-					0.00	
	2024			1			-		0.00	
	2025				-	-	-		0.00	
	2026	-		-	-	-			0.00	
	2027	-	-	-	-				0.00	
later years	2020								0.07	
Total		0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.27	

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NAME OF THE OWNER, OWNE		2U Prospective		ntingent urces	PR	MS 2P Reser	ves	SEC Proved Reserves Additions			
Gas [bln sn			Dev.	Dev.	Undev	Undeveloped		Undeveloped		Undev	Developed
		Prospect	Pending Post-DG1	Pending Post-DG2	Post DG3	Post-DG4	Developed	Ondev	Developed		
ARPR 31 12 2009	before last					0.63		0.20			
ARPR 31.12.2010	last					0.51		0.29			

Name :

Signature :

VP Technoloal (or VP-X)
Lismont, Bart

0 1

Name :

For ADL-RE (RXC or RXHM)
ne : Emelle, Chima

Signature :

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Note: Production forecast and PDRA forecast need to be fully consistent with economic and financial evaluations and results presented in the GIP, HCM foecast need to be captured in HRV-MS, which is the single data source for HCM.

developed reserves additions minus cum produciton			
2P Reserves Developed	SEC Proved Developed		
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26.2	12.3		
23.1	9.3		
20.3	6.4		
17.5	3.6		
15.2	8.2		
13.2	6.1		
11.4	4.3		
10.1	7.0		
9.0	5.9		
70	4.0		

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ESTIMATE FACT SHEET Nembe Creek FOD Nigeria			Version 2.4 Confidention Approved Cost & Schedule Estima	
Nigeria		Project No.:	C1102	20
Estimate	or: Olaribigbe, Elias	Planner:	Dadi, M	lusa
Cas	se: Base	R	ates of Exchange are as	ner SI-SY Data Set
Market Scenario: RV	Estimate Type: 3		ost are in: USD Millions	per or on baid ser
Estimate Start / End: FID Ma	ar-2007 / RFSU May-2012		EDM Date:	
ategory			Total Costs	1-Jul-10
Facilities				
<wells></wells>			36 180	
Owners cost (incl. insurance,	pre-FID, Capitalized interest)		6	
Market Escalation, EPC Premi			2	
Contingency	Facilities: 18%	<wells⊳: 0%<="" td=""><td>7</td><td></td></wells⊳:>	7	
nflation		True.		
			3	N.
proved Total Project Estimate	e, MOD	P10 205	P50	P90
		-12%	70.0	20%
sumptions:		OK	12	2070
	\$1 min of Facilities cost estimate is actual spe-	rit in 2008. Estimates for the outstand	ding works are based on awa	urded appoint a contract
st. and Schedule Premise	cost estimate includes wells contingency by V contingencies are deterministically derived us constraint. There is plan to contract two rigs to Nambe 4 flowstation via a remote manifold.	ha the IECOV local - throw have not t	trace applied on the amount &	On an all the last
xecution Strategy Premise	Use of existing tig and facilities (flowlines and	d minor facilities installation) call-out a	contracts	
Contract Strategy Cey Project Risks	Cathout contracts  Security/community issues, Poor contractor gu	vality, funding and internal and exter	nal n'erface management.	
iey Project Risks			nal n'erface management	
	Security/community issues, Poor contractor gu			
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