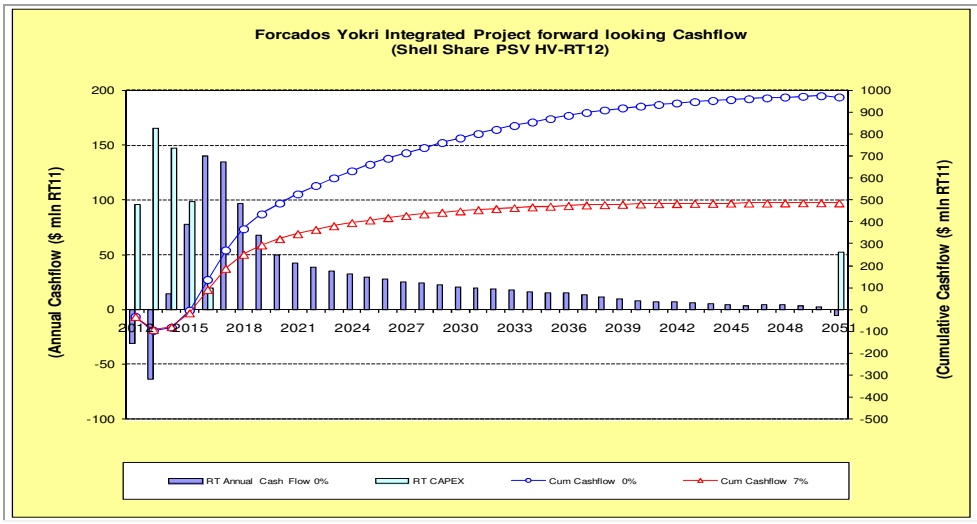
Group Investment Proposal

Summary information

Business unit and company	Shell Petroleum Development Company of Nigeria Limited (SPDC)
Group equity interest	100% in SPDC, whereas SPDC is the Joint Venture (JV) operator of an unincorporated JV with a 30% interest.
Other shareholders/partners	Nigerian National Petroleum Corporation (NNPC: 55%), Total E&P Nigeria Ltd (10%), and Nigerian Agip Oil Company (NAOC: 5%)
Business or Function	Upstream International (UI)
Amount	This IP seeks approval for a Shell equity investment of US$ 548million MOD 50/50 (CAPEX-US$ 542.3million and OPEX-US$ 5.7million). This investment consists of US$ 40.4million unspent sum from GIP 21.11.07 and US$ 507.6million being requested in this proposal, aggregating to a total Shell investment of US$867.0million inclusive of US$359.4million previous approval..
Project	**Forcados Yokri Integrated Project (FYIP)**

Main commitments

Description	100% JV ($'mln, MOD)			Shell Share ($'mln, MOD)	
	Previous IP	Incremental IP	Total JV	Incremental	Total Shell Share
Oil Facilities	434.9	600.8	**1,035.7**	180.2	**310.7**
AG Gathering & Gaslift Facilities	448.0	735.2	**1,183.2**	220.6	**355.0**
Drilling/Completion/Recompletion	150.0	140.1	**290.1**	42.0	**87.0**
Owners Costs (excl SCD & Training)	121.1	13.3	**134.4**	4.0	**40.3**
Contingency (50/50)	37.4	187.5	**224.9**	56.3	**67.5**
Project OPEX (SCD & Training)	6.5	15.1	**21.6**	4.5	**6.5**
SUB TOTAL (50/50 MOD)	**1,197.9**	**1,692.1**	**2,890.0**	**507.6**	**867.0**
Overrun Allowance to 90/10 MOD	13.0	240.5	**253.5**	72.2	**76.1**
TOTAL (90/10 MOD)	**1,210.9**	**1,932.6**	**3,143.5**	**579.8**	**943.0**

Reserves/Resources	This project is aligned with SPDC's strategic goals and priorities by maturing economic truncated 2P reserves of 89.91 MMstb of oil and 55.73 Bscf of gas (Shell Share) and 1P reserves of 55.65 MMstb of oil and 11.56 Bscf of gas.
Production	Oil production from this project peaks at 97.6 Mbopd (with incremental being 75 Mbopd) and gas production of 67.6 MMscf/d (37.7 MMscf/d of NAG and 29.9 MMscf/d of AG) respectively by 2014 thus contributing to SPDC's gas supply to DomGas.
Source and form of financing	This investment will be financed by JV cash call and Shell Share capital expenditure will be financed with SPDC Ltd own generated funds and/or the existing loan arrangement if required.
Summary cash flow	

Summary economics		NPV7% (US$ mln)	VIR7%	RTEP (%)
	Base Case HV-RT12	486.4	1.03	>50
	Base Case RV-RT12	340.4	0.72	39

Section 1: The proposal (management summary)

The Forcados Yokri Field, located some 50 km South-West of Warri in the Western Niger Delta (OMLs 43 and 45) commenced oil production in 1970.

A re-development project, Forcados Yokri Integrated Project (FYIP) was initiated for the field in late 1990s. With FID in 1999, the scope covered development of a total expectation reserves of 292 MMstb (proved reserves of 201 MMstb) of oil and 92 Bscf (proved reserves of 52 Bscf) of gas from 25 new oil wells, 1 sidetracked oil well and gaslift of 62 existing drainage points, installation of New Estuary, South Bank, North Bank and Yokri Flowstations to replace existing flowstations, Gas gathering & Export plant at North Bank, Forcados Terminal Power upgrade and Yokri field electrification network.

The new FYIP oil and gas facilities have combined installed capacities of 265 Mb/d and 110 MMscf/d respectively. This is broken down into **OIL:** New Estuary Flowstation (120 Mb/d); North Bank Flowstation (45 Mb/d); South Bank Flowstation (40 Mb/d processing but 160Mb/d pumping capacity to cover Estuary production); Yokri Flowstation (60 Mb/d) and for **GAS:** Yokri (2MMscf/d), South Bank Flowstation (20MMScf/d), and the Central Processing Facility-CPF (110MMscf/d). However, the Main Export Compressor is sized for 230 MMscf/d, originally to cater for gas production from Odidi, but now to handle gas from SSAGS project.

With the installation of the facilities nearing completion in Feb 2006, the project site suffered from the impact of militant insurrection in the Niger Delta. Project execution was stalled and assets were abandoned in a hurry without preservation. The completion status before site evacuation was:

- Drilled 25 new wells and 1 sidetrack (one well was found wet)
- Hooked up 12 wells and producing since 2003.
- North Bank CCP (230mmscf); Installation 95% completed.
- South Bank Flowstation(160Mbopd): Installation 95% completed. Commenced pre-commissioning.
- Estuary Flowstation(120Mbopd): pre-commissioning completed.
- North Bank Flowstation (45Mbopd): 90% completed
- Forcados Yokri Flowstation(60Mbopd): 80%
- Forcados Terminal Power upgrade; pre-commissioning completed.

However, all completion status has been downgraded significantly to account for assets obsolescence, vandalisation and deterioration arising from lack of preservation.

Revised Project Objectives

The project was initially planned to export associated gas to NLNG via OGGS. With the Government drive for increase in Domestic gas production, backed-up with funding and contracting enablers, a new opportunity emerged to complete the FYIP redevelopment as a domestic gas supply hub (DomGas). The new Domestic Gas supply requirement calls for more stringent conditioning of the gas prior export thereby requiring additional gas processing (HCDP & Recompression). A non- associated gas (NAG) well is also to be drilled to develop gas reserves in aid of the DomGas supply objective. This DomGas supply requirement imposes additional scope for fiscal metering and replacement of Odidi – ELPS pipeline link with an 18" x 5.5km line, a fall out from the divestment of OML-42.

The original FYIP scope for clusters upgrade included extending the decks on existing Estuary cluster jackets to permit installation of gaslift facilities and electronic automation control units. The scope has now increased significantly due to severe infrastructure degradation exacerbated by long absence from site

when corrosion protection systems could not be maintained. Some of the clusters also suffered explosives attack during Niger Delta Militant insurrection and vandalization from illegal oil bunkerers. The bulklines handling production from these clusters to the flowstations have also suffered significant corrosion with over 60% currently out of service on failed integrity. An infrastructure renewal campaign is therefore incorporated for the Estuary Clusters to assure continued production from these assets. Taking into cognizance further oil development opportunities/prospects, all 18 existing clusters and some 93km out of the 122km, 6inch bulklines have been earmarked for replacement as part of FYIP Project ahead of finalization of ongoing studies for Forcados West/FOD opportunities.

The contractors that were initially engaged via tri-partite arrangements to rescue the failing Hyundai Macdonald- Sufolk (HMS) EPC consortium, and had been responsible for substantially advancing the facility installations prior site abandonment, were re-engaged directly for the completion works.

Contractors have mobilized for the completion activities on the original scope and execution of new scope items which are required for the achievement of Flares-Out from the project area and DomGas supply by May 2014.

Schedule for some of the key project activities:

Activity	Schedule		
	Target Date	P50 Date	P90 Date
Revised GIP	31-Mar-12	25-Apr-12	15-May-12
First Gas	12-Oct-13	08-May-14	12-Aug-14
Project Complete	07-Feb-15	02-May-15	21-Aug-15

Inspection of the abandoned assets has commenced in the flowstations and CPF/CCP. Findings so far show that most of the electronic systems require replacement while mechanical equipment needs overhaul to restore their functionality, consequently restoration works have started in earnest. The delivery of long lead items for the DomGas supply component is the most schedule critical activity and drives the OSD for the project.

Cost Growth

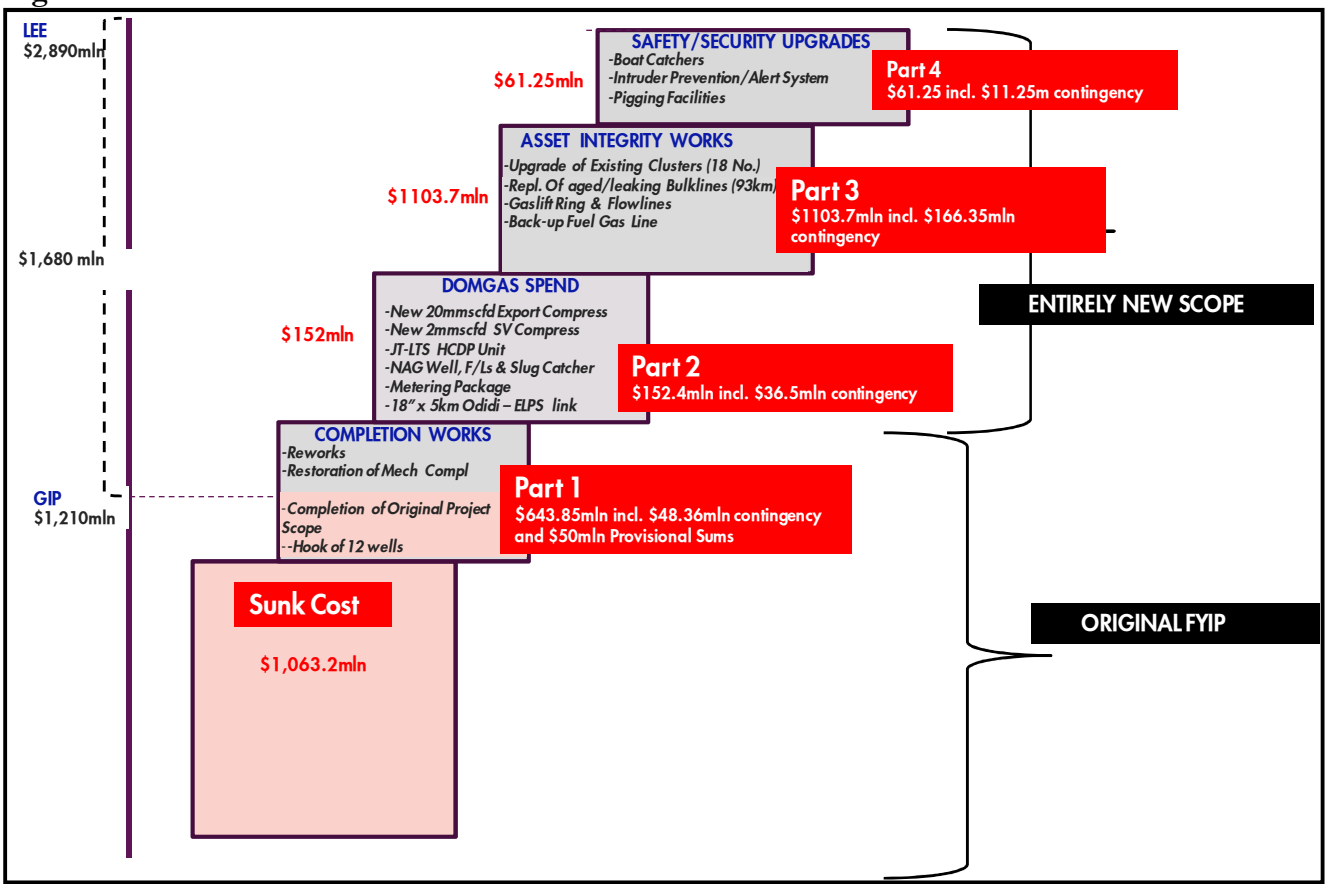
The FYIP Group Budget Proposal of US$783.2 million (50/50 estimate, US$235 million Shell Share) was first considered sound in 1999. Subsequent GIP revision in November 2007, approved a budget of US$1,210.9 million (50/50 estimate US$363.3 million Shell Share) to complete and commission the facilities.

The costs have escalated from the last IP approval mainly due to the above changes in project objectives and scope. Fig-1 below shows the details of significant changes.

The original project scope to realize flares down in the node, including spends to reinstatement functionality of degraded and/or vandalized partially built items, has an estimate to complete of US$643.85mln (inclusive of US$ 71mln contingency) see PART-1 in figure-1below. Taking into account the cost already sunk, this will bring completion cost for original FYIP project to $1,707.1million relative to the current IP of $1,210.9million.

The scope for Domgas Supply, Estuary Cluster Integrity Restoration and Critical Safety components (PARTS-2, 3, & 4 in Figure-1 below), which were all not in the original project objectives account for US$ 1,165million (inclusive of US$ 117.6million contingency) of this request.

Figure-1: FYIP COST GROWTH



This investment proposal is to cover increase from $1,210.9 million (US$363.3 million Shell Share) to US$2,890 million 50/50 (US$867 million Shell share) a net increase of $1,680million (138.67%), in the capital required to complete the original scope as well as execute new scope of the project.

The main changes with respect to the previous Investment Proposal are tabulated in main commitments table.

FYIP COST DETAILS (100% JV, MOD, US $ mln)

S/N	DESCRIPTION	Original IP (1999)	1st Revision (2004)	2nd Revision (2007)	This Proposal (2012)	Total Revised IP
1	**Drilling/Completion/Re-Completion**	**175.5**	**-10.5**	**-15.0**	**140.1**	**290.1**
2	**Oil Facilities**	**239.9**	**68.1**	**126.9**	**600.8**	**1,035.7**
3	**AGG Facilities**	**367.8**	**50.2**	**30.0**	**735.2**	**1,183.2**
4	**Owners Cost**		**39.0**	**41.0**	**54.5**	**134.5**
	CAR Insurance		19.0	4.5	18.6	42.1
	Overhead Charges, Salaries etc		20.0	22.5	25.9	68.4
	Additional Security/Logistics Provision			14.0	10.0	24.0
5	**Others**		**0.0**	**41.1**	**-41.1**	**0.0**
	Write-Off Advance Payment to ADAMAC-OPEX			13.1	-13.1	0.0
	Replacement of Siezed Offshore Materials-OPEX			23.0	-23.0	0.0
	Court Cases OPEX			5.0	-5.0	0.0
6	**Contingency (50/50)**		**10.0**	**27.4**	**187.5**	**224.9**
7	**Project OPEX**			**6.5**	**15.1**	**21.6**
	SCD Project OPEX			6.5	8.6	15.1
	Training			0.0	6.5	6.5
	SUB TOTAL (50/50 MOD)	**783.2**	**156.8**	**257.9**	**1,692.1**	**2,890.0**
8	**Overrun Allowance**			**13.0**	**240.5**	**253.5**
	TOTAL (90/10 MOD)	**783.2**	**156.8**	**270.9**	**1,932.6**	**3,143.5**

Funding

The estimated total Capex for FYIP project is approximately $2.890billion (MOD) of which $1.063.5billion is already sunk. The project is funded under the IPP/DomGas Portfolio of projects which enjoys priority, ring fenced budgetary allocation from NAPIMS. The project is in the JV Base Plan for BP11 and will remain a feature in BP 12, BP13 and BP 14 submittals. The expenditure figures are updates to BP11 reflecting the final outcome of ESAR4 concluded in March 2012.

Section 2: Value Proposition and financial context

The FYIP project provides new oil and associated gas handling infrastructure thereby safeguarding oil production from the field and ensuring compliance with Shell Group requirements. As reframed, it will achieve Federal Government Flares Out target and enable SPDC meet its supply obligations to DomGas by developing and producing NAG reserves in the field. The project presents an opportunity to renew Offshore Estuary cluster infrastructure which have become severely deteriorated with increased HSSE exposure to operations; several wells closed-in on bulkline failures. The gains include safeguarding of significant existing production from 91 Wells in the Forcados Estuary.

Failure to complete the project will mean that the remaining booked reserves(**99.7MMboe-Shell Share**), other planned 'medium term' development activities under maturation in the field with contingent resource development of some **60 MMboe-Shell Share**, and longer term development prospects will be regretted and SPDC will possibly lose operatorship of the field when license comes up for renewal in **2019.** These planned 'medium term' activities include Forcados West Development, Forcados Workovers and Forcados Further Oil Development.

Summary Economics[1]

The economics for the Forcados Yokri Integrated Project (FYIP) IP was carried out on a forward-looking basis using the project 50/50 level III cost estimate and the associated production forecast from the project team. The base case was evaluated using Latest Estimate (LE) costs and PSV-HV.

Among others, sensitivities on capex, reserves, PIB, were carried out on the base case to determine the value of the project under different scenarios. The summary economic indicators together with the sensitivities and risk and uncertainty are shown in table 2 below.

The project is very robust at all the PSVs. Even with a consideration for an unlikely situation of license not being renewed post 2019 the project base case is still robust. More than 50% of the value is achieved within current license period due to the initial high production volumes.

Risk and uncertainty analysis was also carried out for the project base case. The NPV probability density function (PDF) curve is shown in Appendix 4.

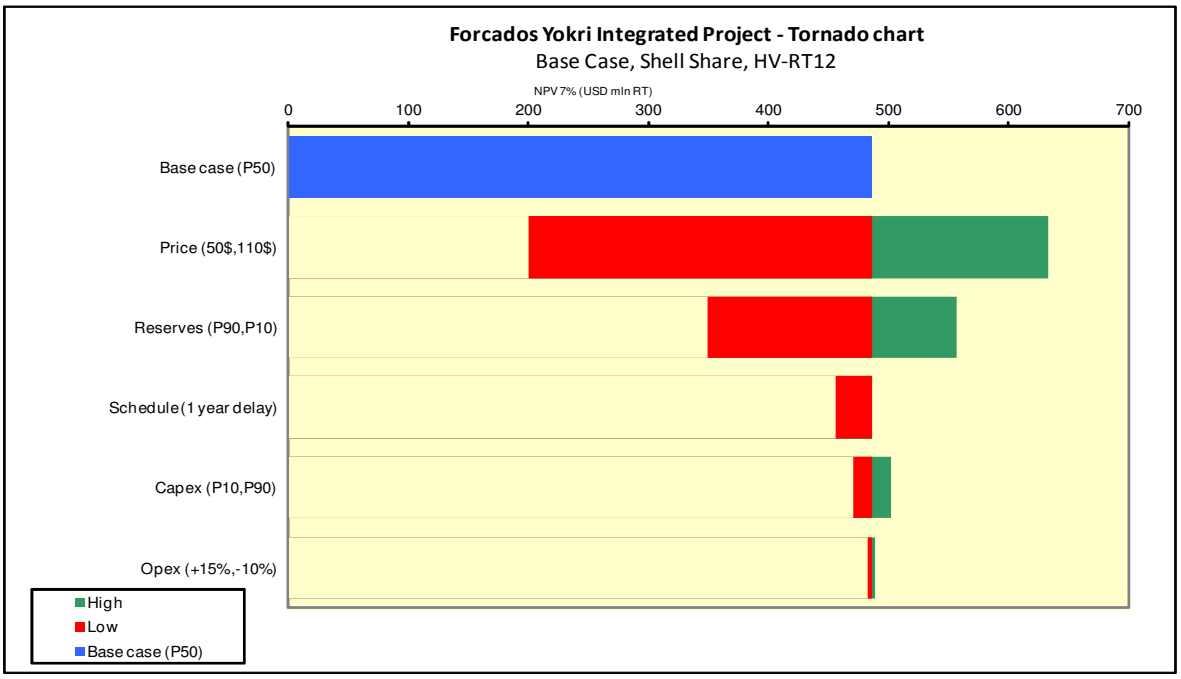
[1] Economics based on post ESAR dataset.

Table 2: Economics Grid

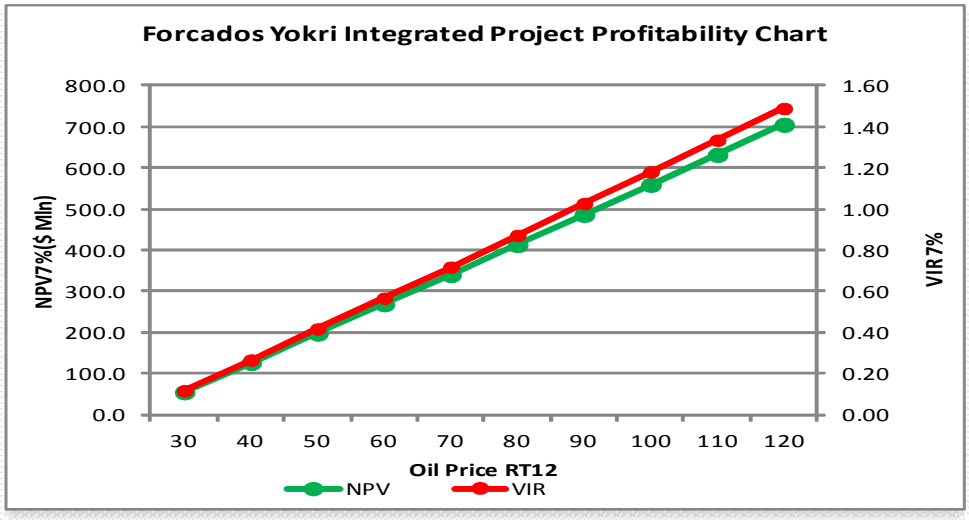
PV Reference Date: 1/7/2012	NPV (S/S $ mln)		VIR	RTEP	VTE	UTC (RT $/boe)		Payout-Time (RT)	Maximum Exposure (RT- AT)
Cash flow forward from: 1/1/2012	0%	7%	7%	%		0%	7%	(yyyy)	$mln (yyyy)
Base Case									
SV ($50/bbl & NGMP based gas price)	463.6	**199.7**	**0.42**	25	0.80	9.0	10.6		
RV ($70/bbl & NGMP based gas price)	712.3	**340.4**	**0.72**	39	1.58	9.0	10.6		
HV ($90/bbl & NGMP based gas price)	969.9	**486.4**	**1.03**	>50	2.67	9.0	10.6	2016	*177.5 (2014)*
BEP* (RT $/bbl)						13.1	22.2		
Sensitivities (using HV-RT12)									
High CAPEX (P90)		**470.8**	**0.88**					2016	*229.4 (2014)*
Low CAPEX (P10)		**501.8**	**1.22**					2015	*143.2 (2013)*
High OPEX (+15%)		**482.9**	**1.02**					2016	*178.3 (2014)*
Low OPEX (-10%)		**488.7**	**1.03**					2016	*177.0 (2014)*
HV cost at HV market factor		**487.7**	**1.04**					2016	*175.0 (2014)*
High Reserves (P10)		**556.7**	**1.18**					2015	*162.1 (2014)*
Low Reserves (P90)		**349.6**	**0.74**					2016	*207.7 (2014)*
License expires in 2019		**289.4**	**0.61**					2016	*177.5 (2014)*
Life Cycle Economics		**394.3**	**0.38**	18	1.71			2016	*225.9 (2014)*
Project with ring fencing		**484.1**	**1.02**					2016	*95.5 (2013)*
1-Yr Production delay		**457.3**	**0.97**					2017	*176.5 (2015)*
1.5% cost markup due to BVA issues		**455.2**	**0.92**						
Project under MCA		**476.0**	**0.46**						
PIB IAT_v9		**438.4**	**0.93**						
PIB House_v12		**563.1**	**1.19**						
Additional Uncertainty and Risk Analysis - using HV ***(only required for proposals > $ 300 mln S/S)***									
NPV(P10)		**558.4**	**1.18**						
NPV(P90)		**339.0**	**0.70**						
EMV at HV / eVIR at HV		**466.0**	**0.98**						
Probability of NPV > 0 at HV		**100%**							
Dispersion = EMV / (NPVP10-NPVP90) at HV		**2.1**							

*Corresponding gas price is 14% reduction of the domestic gas profile

FYIP Tornado Plot.



FYIP Profitability Plot



Key Project Parameter (Shell Share)

Parameter	Unit	BP11 Provision	Low	Mid	High	Comments
Capex (MOD)	US$ mln	727.4	470.3	542.3	615.8	Change in project objectives and scope
Opex (MOD)_Project	US$ mln	NA	5.7	5.7	5.7	SCD OPEX and training costs A significant OPEX amount was spent in previous IP (Community project and related activities already met)
Production Volume	mln boe	101.0	85.2	109.2	123.6	Change in project objectives and scope 9% of the volume produced is gas
Start Up Date	mm/yy	Sep-13	Feb-14	May-14	Aug-14	The BP11 first Gas date of September 2013 was based on a schedule risk analysis performed before award of the Offshore Flares Down contract DG3, without the benefit of input from the offshore installation contractor
Production in first 12 months	mln boe		4.4	5.2	5.4	5% of the total volume produced

Economics Assumptions

Base case

- Oil PSVs of $90/bbl @HV-RT12 with appropriate offset applied.
- Gas sales to domestic market Aggregate Domgas PSV (based on NGMP framework as at 21/03/2012).
- Oil taxed under PPT (PPT tax rate of 85%).
- Gas taxed under CITA with Associated Gas Framework Agreement (AGFA) incentive.
- ABCM OPEX provided by the project team.
- SCD provided by the project team.
- Education Tax of 2% assessable profit.
- NDDC levy of 3% total expenditure.
- GHV of 1000 btu/scf.
- Flare Penalty of $3.5/Mscf was applied and is not tax deductible.
- Abandonment cost is estimated at 10% of total project RT CAPEX.

PIB and MCA economics assumptions are shown in Appendix-3

Section 3: Risks, opportunities and alternatives

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

1. Scope Reduction Potential:

The FYIP completion scope defined in this GIP has been developed on a worst case scenario basis. The scope is premised on major overhaul of equipment packages, factory refurbishment of control systems, workshop repairs/re-calibration for instrument and valves, and replacement of all electronics etc. The scope for the Estuary Cluster/Bulkline is also based on a complete replacement of all 18 Cluster Jackets and Bulklines (rationalized from 122km to 93km to align with current production forecast). The cost estimate and schedule development have been based on this philosophy with robust provisions set aside to cover the scope creep from asset integrity inspections. **Opportunity:** There is a significant cost saving opportunity relative to the GIP request, given the following;

- A full inspection and technical integrity verification program is being implemented as part of completion works using OEM Vendors and specialist NDT service providers. This will determine actual refurbishment, replacement and/or repair scope for partially installed facilities.
- Some 5 out of the 18 Clusters that were marginally economic (VIR's of 0.15 to 0.34) during cluster economic analysis and 30km bulklines of suspect integrity, which are currently producing are included in the completion estimate covered by the request.

The cost included in the estimate for these items, $190million, could potentially be saved if the scope is not executed. This amount is to be held in Management Reserve to be disbursed under control of SEPA-UIG.

2. Project Funding by Venture Partner:

NNPC's share of Project funding is ring fenced in the Domgas/IPP budget of the Federal Government of Nigeria for domestic gas supply projects with special enablers for expedited contract approvals. With the inclusion of another major infrastructural development project like SSAGS in this basket, there is a risk that adequate funding allocation to enable progression at planned pace of delivery might be challenging. NAPIMS may therefore demand that the Asset Integrity works (Offshore phase-2 works) be funded under the MCA arrangement **Mitigation:** The Domgas projects funding basket make up some 60% of SPDC's capital project budget over the next 2years and continue to enjoy priority rating. Economic evaluation of this MCA scenario shows that FYIP project remains viable with only marginal reduction in NPV ($486.4mln to $476mln), however, the VIR@7% drops from 1.03 to 0.46 and with 2 additional clusters becoming marginally economic.

3. Subsurface uncertainties:

These are considered minimal based on well data. All 25 wells in the revised scope have already been drilled. Only one was found wet, while others were on prognosis. However, pressure depletion in the major reservoirs (D5.000 and D6.000) is a concern. **Mitigation:** This has been taken into consideration in the production forecast and reserves estimates. Furthermore, studies have already being initiated for introduction of Water Injection for pressure maintenance in the Forcados Yokri Fields in the future.

4. NCD Act Implementation

- Nigerian Content Directive (NCD) Act compliance requirements could result in project cost and schedule overrun due to limited in-country material manufacturing capacity and capability. **Mitigation:** A detailed NCD compliance Plan has been developed and is undergoing review by Nigerian Content Development and Monitoring Board (herein after referred to as Board). Engagements with the Board in 2011 indicate that it is amenable to granting waivers for overseas sourcing for the project where there is a compelling business case. The board has already granted waivers to procure the subsea fibre optic cables and Line pipes outside Nigeria. The NCD plan recognised requirement for waivers for Valves, HC Cables, Major Rotating equipment packages, etc.

5. NNPC Contract Award Approvals

Delayed approvals from NAPIMS/ NNPC are a feature of contracting in Nigeria. The approved plan for FYIP completion is premised on award of remaining contracts on Shell sole risk basis. The Offshore Flares Down contract and sub-marine cable procurement contracts were awarded on sole risk basis in 2011. **Mitigation:** SPDC has maintained close and regular engagement with NAPIMS to ensure common understanding of project priorities and urgencies. Thus far NAPIMS has demonstrated good faith in approving budget requests and cash calls.

6. Social Performance &Risks

- **Security situation in SPDC West operational area:** Though improved, , there remains a risk of project delay from security related incidents, particularly offshore, where pirates, armed youths and armed gangs still operate regularly. **Mitigation:** A security risk assessment with mitigation plans is in place to reduce security risks to ALARP. In addition, the FYIP has been integrated into the overall Swamp-1 and Forcados Terminal security arrangements. A dedicated Security Adviser for Major project has since been resourced to give more focus to managing FYIP project security risks and integrate experience from other completed projects like AFAM, Gbaran Ubie, NCTL etc. Despite these mitigations, a major security incident with significant schedule and cost impacts cannot be ruled out given the requirement to rely on Government Security Agencies.

- **Sustainable Development:** Global Memorandum of Understanding (GMoU) for the Ogulagha Cluster are yet to be finalized and deployed. **Mitigation:** A Project MOU has been finalized along the lines of the GMoU framework and is being used to manage community interfaces.

  The community power and water supply network project funded from FYIP SCD budget is largely complete while the 5km road and fish pond projects are yet to be executed. **Mitigation:** Completion of these projects and tie back to the new production facilities for interdependency is in FYIP's plan. Other legacy projects with the communities have been migrated into the GMOU and NGN300million (US$ 2million) funding released for implementation.

- **HSE Management:** HSE Management is being implemented in line with requirements of the SPDC Major Projects & Engineering HSE Management System (adapted from the Group HSE Management System). The criticality of ensuring that residual project risks at Hand-Over to Operations is ALARP given the mis-aligned phases of various aspects of the project is well understood and a comprehensive review is planned as part of the New Onshore Scope detailed design.

- **Environmental Management Plan (EMP):** Some of the social impact mitigation activities of the EMP are yet to be implemented and could potentially be a source of strive/agitation from the communities. **Mitigation:** FYIP has to date provided agency employment for 28 Indigenes and plans are being finalized for trade skills acquisition training provision to 80 other indigenous youths. Other human capital empower programmes in the EMP are being reviewed for implementation.

Key Opportunities

- **Opportunity for Further Oil Development:**

The proposal protects the 33 kpd production from the field, unlocks some 10kbd currently locked in potential, as well as, provides the leverage for further oil development.

Alternatives Considered: The Considered alternative is not to complete the FYIP. This will mean NFA production of some 33kpd will be shut in, the reserves development programme will be suspended and 332.4 MMstb (100%) booked reserves will be de-booked. The field comes up for license renewal in 2019, non execution of the programme and a shut-in of the field may result in SPDC relinquishing the acreage.

- **Exploration scope and Future development (T/C)**

  Further development opportunities exist in the Forcados Yokri field that will benefit from the installed facilities by FYIP. These opportunities include Forcados Workover, Forcados west and Forcados FOD projects. These projects will provide access to some additional 178.3 MMstb when delivered.

  In the long term, over 200 MMboe near-field exploration prospects exist and are currently being matured by the exploration team. These prospects include Forcados North, OML43_WFN01, Forcados Deep, Forcados Northwest and Ogulagha.

Section 4: Carbon management

The purpose of this project is to limit green house gas emissions to the environment. Being already in late execution, the opportunity to register the Project under the Clean Development Mechanism (CDM) in order to access an income stream from tradable Certified Emissions Reduction Certificates (CERTS) cannot be initiated. However, the project will help in promoting associated gas utilisation in Nigeria.

Section 5: Corporate structure, and governance

This project fits within the existing SPDC corporate structure and governance. Consequently, it will comply and respect all relevant and existing governance.

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

This proposal complies with Group Business Principles, policies and standards. Functional support for this proposal is provided by Finance, Sustainable Development, Supply chain management, HSE, Operations, Legal, Treasury and Tax functions.

Section 7: Project management, monitoring and review

Project execution has progressed in accordance with the Opportunity Realization Process and Shell Global Processes. Critical positions for project delivery have now been fully resourced after an initial challenge with attracting talent when future status of project was still uncertain. A dedicated project team is managing day-to-day activities under supervision of the GM Projects with Project Services Support from the SODA Matrix Organization. Overall project progress is monitored by DRB. GM Projects reports progress to VP Technical UIG who is providing support, challenge and oversight on the FYIP Project from the regional end. As a Flagship project, this project falls under the auspices of PTM. The 'Fact Sheet' supporting the projects latest cost and schedule view, has been reviewed and endorsed by PTE/S.

Section 8: Budget provision

Provision made for budget in BP11 covers the requirement for the year 2012. The additional budget to cover the requirements for 2013, 2014 and 2015 has been re-phased in line with re-scheduled activities and 2013 will be requested as part of the BP12 and future year's budget allocation discussions with Partners

FYIP CAPEX PHASING (US$, 'mln)

ACTIVITIES	Prior 2001	2010	2011	2012	2013	2014	2015	2016	Total
WELLS	142.0		-	-	33.1	80.0	36.0		291.1
OIL FACILITIES & INFRASTRUCTURE	368.7	5.5	47.1	173.0	226.3	256.0	173.7	69.5	1,319.6
GAS INFRASTRUCTURE	454.4	7.0	36.2	145.6	302.6	174.0	137.9	-	1,257.7
PROJECT OPEX (SCD &TRAINING)	2.6	-	0.0	6.5	5.8	5.5	0.7	0.5	21.6
TOTAL	**967.8**	**12.5**	**83.2**	**325.1**	**567.7**	**515.4**	**348.3**	**70.0**	**2,890.0**

Section 9: Group financial reporting impact

The impact of this Investment Proposal on Shell Group Financials is shown in the table below (commitment phasing and expenditure are Shell Share (50/50) MOD on the project's base case at $90/bbl HV-RT 1/7/2012):

US$ Mln	2012	2013	2014	2015	2016	Post 2016
Total Commitment	97.5	170.3	154.6	104.5	21.0	
Cash Flow						
SCD Expenditure	2.0	1.7	1.7	0.2	0.2	
Pre-FID Expenditure						
Capital Expenditure	95.6	168.6	153.0	104.3	20.9	
Operating Expenditure	20.6	23.2	18.4	16.9	15.3	478.1
Cash flow From Operations	12.6	70.1	127.6	163.4	179.5	1505.6
Cash Surplus/(Deficit)	-83.0	-98.5	-25.4	59.2	158.7	1505.6
Profit and Loss						
NIBIAT +/-	36.7	37.1	58.4	81.1	87.4	1333.9
Balance Sheet						
Avg Capital Employed	59.8	187.5	297.2	350.1	325.4	127.9

Section 10: Disclosure

Material disclosures, if any, will be done in line with the Group and SPDC Disclosure policies and guidelines.

Section 11: Financing

Shell's share of the capital expenditure will be met by SPDC's own cash flow and the existing shareholder facility with Shell Petroleum Company Limited ('SPCO') if required.

Section 12: Taxation

There are no unusual taxation features at this stage

Section 13: Key Parameters

The following is the main aspect of this proposal:

- Approval of funding of US$ 548million MOD 50/50 composed of CAPEX-US$ 542.3million and OPEX-US$ 5.7million for the completion of the revised scope of the Forcados Yokri Integrated Project (FYIP).
    - This additional cost brings the overall FYIP cost to US$ 867.0million, Shell share and contains US$ 40.4 million of unspent sum from GIP 21.11.07.
    - The additional costs will be financed with JV funding and Shell share of the expenditure will be met by SPDC's own cash flow and/or the existing shareholder facility/loan facility with SPCO.
- GIP Request is premised on a 08-May-2014 (P50- OSD) First Gas Export from the CPF to ELPS, with overall completion of outlined scope by 21-August-2015.

Section 14: Signatures

This Proposal is submitted to UI for approval.

Supported by:

.....
Henry, Simon P RDS-ECSH

Date.... /.... /...

For Business Support:

.....
Brinded, Malcolm A RDS-ECMB,

Date.... /.... /....

Business Approval

.....
Voser, Peter R RDS-CEPV

Initiator: Toyin Olagunju, SPDC-UIG/T/P

Insert Footer from IDM (based on IDM section 5.2)

Appendix:

1) Estimate Fact Sheet – Approved cost and schedule estimate as per IDM chapter 4
2) Lifecycle HCM forecast Sheet – Approved HCM Forecast as per IDM chapter 4
3) PIB and MCA assumptions
4) NPV7 probability density function (PDF) curve
5) FYIP Project Overview

Appendix-1: Cost and Schedule Estimate Fact Sheet.

ESTIMATE & SCHEDULE FACT SHEET

to be included in GIP and PCN submissions

Version 2.5 Confidential

FORCADOS YOKRI INTEGRATED PROJECT

Approved Cost & Schedule Estimate

SPDC Western Division - Swamp/Shallow Offshore

Project No.: C-12011

Estimator: Idubamo Monigha **Planner:** Etebu Pius

Case: Base

Rates of Exchange are as per SI-SX Data Set

Market Scenario: LE **Estimate Type: 3** **Costs are in: USD Millions**

Estimate Start / End: FID Jan-1999 / Project Completion Mar-2016 **EDM Date:** 1-Jul-11

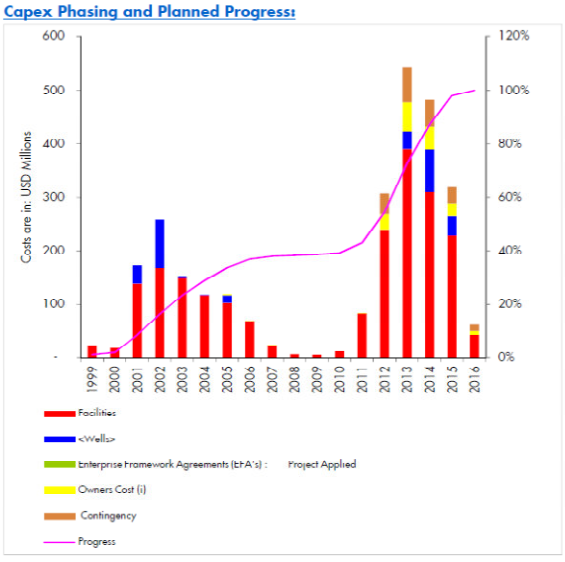
Category			Total Costs	
Facilities			2,131	
<Wells>			291	
Enterprise Framework Agreements (EFA's) :	Project Applied / Verified, Not Applied		-	/ -
Owners Cost (i)	(incl. Insurance, pre-FID, Taxes & Capitalized interest)		160	
EPC Premium (ii)			16	
Contingency	(i) 14%, (ii) 33%	Facilities: 14% <Wells>: 0%	196	
Inflation			96	

	P10	P50	P90
Approved Total Project Estimate, MOD	2,698	2,890	3,122
	-11%		14%

Assumptions: OK

Estimate & Schedule Premise	FYIP started in 1999 and $1.06bln of this estimate is sunk costs. The rest of the estimates are based on recently completed and ongoing contracts. Probabilistics cost risk analysis using @Risk has been done to calculate the project contingencies P10, P50 & P90. Owners costs have been calculated using the manning profile approved for the execution of the remaining scope. Q1 Latest Estimate (LE) escalation factors have been applied in line with provisions of Jan 2012 Capital cost outlook for projects. Well costs have been derived using SPDC well cost estimating template by well engineering; incorporated in line with agreed in-house SPDC methodology. Schedule durations were based on recently completed and ongoing projects with simillar activities aligned with project execution strategy. Schedule risk analysis was carried out in line with PG90.
Execution Strategy Premise	To guarantee flawless delivery, FYIP is subdivided into three main execution packages. Onshore completion package attending to the outstanding activities of the original project scope involving use of multiple POs and exisiting contracts. New Onshore package comprising new work items required to satisfy flares out and DOMGAS demands utilising EPC strategy. The Shallow offshore package comprising cluster jackets and bulklines replacement using both existing EPC contract and proposed EPC strategy for outstanding work items.
Contract Strategy	Use of existing construction & installation contracts, award of procurement contracts using EFA for rotating equipment replacement parts and EPC for new onshore scope as well as all offshore scope.
Key Project Risks	Security/community issues, Scope creep, Funding issues (which could lead to project delay), Internal and external interface management.
Exclusions	SPDC financing of interest during construction.
Benchmarking & Metrics	Estimate is largely based on awarded contracts; pipeline and cluster activities estimates benchmarked with recently completed projects and ongoing offshore Phase-1 contract. Schedule durations have been benchmarked with completed projects. IPA benchmarking was undertaken.

Capex Phasing and Planned Progress:



Key Schedule Dates:		
Phase	Finish (P50)	Finish (P90)
FID	Jan-1999	Jan-1999
South Bank F/S Commissioning	Feb-2013	Mar-2013
Yokri F/S Commissioning	Sep-2013	Nov-2013
CCP/CPF Mechanical Completion	Jan-2014	Apr-2014
CCP/CPF Commissioning	Feb-2014	May-2014
Commissioning of Odidi-ELPS Line	Apr-2013	Jun-2013
Commissioning & Handover of FLB/Plant Building	Apr-2013	Jul-2013
1st Gas	**May-2014**	**Aug-2014**
Handover SOAGO+ Line	Aug-2014	Dec-2014
Onshore complete	Aug-2014	Dec-2014
Phase 1 Offshore complete	Nov-2014	Feb-2015
Phase 2 Offshore complete	May-2015	Aug-2015
Project Completion	Mar-2016	Jul-2016

DCAF TA 1

Date :
Name : Nwakaeze, Emeka
Signature :

Development lead

Date :
Name : Ogagarue, Emmanuel
Signature :

VP Project Services

Date :
Name : Mes, Hans
Signature :

Project Manager

Date :
Name : Egemba, Walter
Signature :

Appendix-3: PIB and MCA Economics Assumptions.

PIB Assumptions (House Version)

- No production allowance used in analysis.
- CIT is 30% of taxable income with a depreciation schedule of 3x25%, 24% for qualifying expenditure and it is not deductible for NHT calculation
- NHT is 50% with a depreciation schedule of 4x20%, 19% for qualifying expenditure.
- 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
- 15% cost overseas applied.

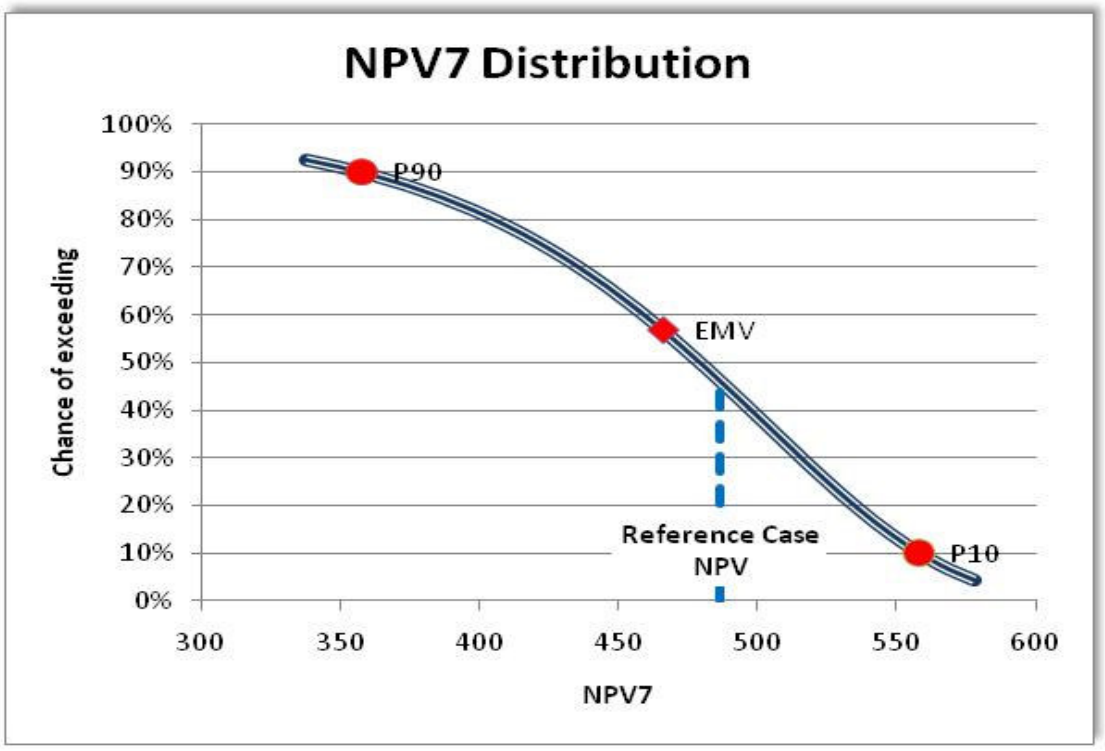
PIB Assumptions (IAT version)

- No production allowance used in analysis
- NHT depreciation schedule is 4x20%, 19% for qualifying expenditure.
- No capital investment credit/allowance (ITC or ITA) or uplift is granted under the PIB
- CIT depreciation schedule is 3x25%, 24%, for qualifying expenditure.
- CIT is 30% of taxable income and is not deductible from NHT
- Education tax calculated as 2% of its assessable profit & 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%
- 20% of overseas cost is non-deductible for determination of NHT taxable income.

MCA Assumptions

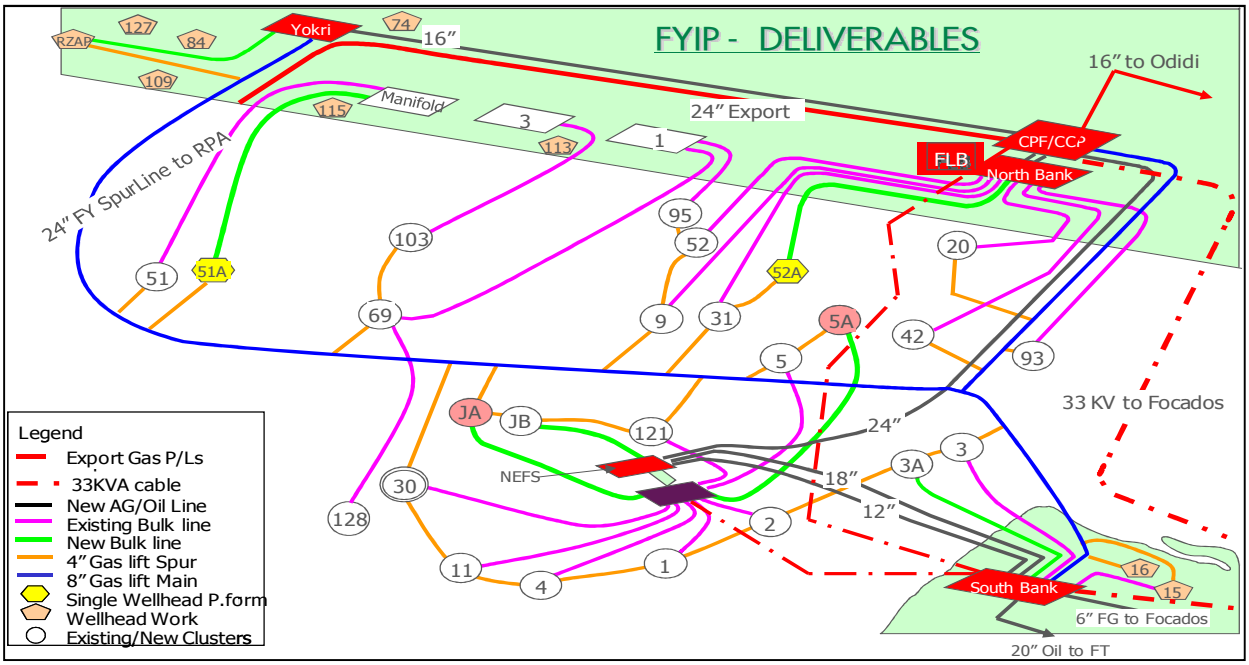
- All FYIP costs on the MCA would be recovered through cost oil.
- Profit oil ceiling of 8% IRR on carried costs
- Current agreement for recovery of carry costs is maintained
- $91.69/bbl – oil at PSV HV-RT in 2012 for HV MCA Economics
- OPEX not carried under current MCA arrangement.

Appendix 4: NPV probability density function (PDF) curve



The reference case has no probability of achieving NPV7<0. The EMV being higher than the reference case is attributable mostly to the skewness of the P10 and P90 reserves.

Appendix-5: FYIP Project Overview



Detailed description of new GIP request items include:

1. **Completion of Oil Processing and AG Gathering Facilities:**
   - US$ 130.49million required to complete and commission the Onshore oil and gas infrastructure that was hurriedly abandoned in the wake of the Niger Delta Militant insurgency. Costs will cover the integrity inspection of all installations abandoned without preservation by the OEM's, vendors and specialists, procurement, reconstruction, completion and commissioning of these facilities to fulfill original project objectives. Costs include provision for implementing the outcomes of asset integrity inspections.
   - US$ 391.3 million required for the completion and commissioning of the offshore component of similar scope above.
2. **Construction of facilities to meet Domestic Gas Supply(Domgas) Requirements:**
   - US$ 99.4million required for Design, Procurement, Construction and Commissioning of all the facilities required to fulfill the new Domgas supply objective of the project viz, 2x2mmscf/d Surge Vessel Gas compressors, 1x20mmscf/d Export compressor, Hydrocarbon Dew Pointing Unit, drilling of NAG Well, construction of NAG flowline and NAG Reception Facility, Fiscal metering facilities and the replacement of vandalized Odidi- ELPs link with a new 18" x5.5km pipeline with end facilities.
3. **Field Wide Gas lifting:**
   - US$ 122.2million to cover the provision of field wide gaslift infrastructure for production enhancement of some 34MMstb (Shell Share). Gaslift has been identified as beneficial to wells in the Forcados Yokri field and the plan is to install a gaslift ring main and spurlines to each of the Well Clusters for these purposes.
4. **Restoration of Well Integrity :**
   - US$ 115.0million for well workovers to restore the integrity of 4 wells including those damaged by explosive attacks during the militant insurrection and actions of oil thieves.

5. **Asset Integrity Related Cluster/Bulkline Works:**
   - US$ 464.29million to cover the replacement of Offshore Clusters and bulklines occasioned by age, degradation and deterioration. The clusters replacement will give opportunity to address the safety and security shortcomings on the existing clusters by including the installation of safe embarkation/disembarkation and pigging facilities. The clusters and bulkline replacement activities are entirely new scope. Its implementation will ensure continued production of some 96.4Mboe of NFA Production.
6. US$ 178.44million provision for Owners costs covering PMT Resources(US$73.989million), CAR Insurance (US$ 18.57million) and increased Security -offshore patrol vessel (US$16.75million)
7. US$ 292.79million P50 contingency provision (US$ 77.33 for inflation and F$15.8million EPC Premium allowance). The Management Reserve is to take account of the significant scope creep potential in the project.