The Shell Petroleum Development Company of Nigeria Limited

Egbema W AG Solution - Investment Proposal

Summary Information

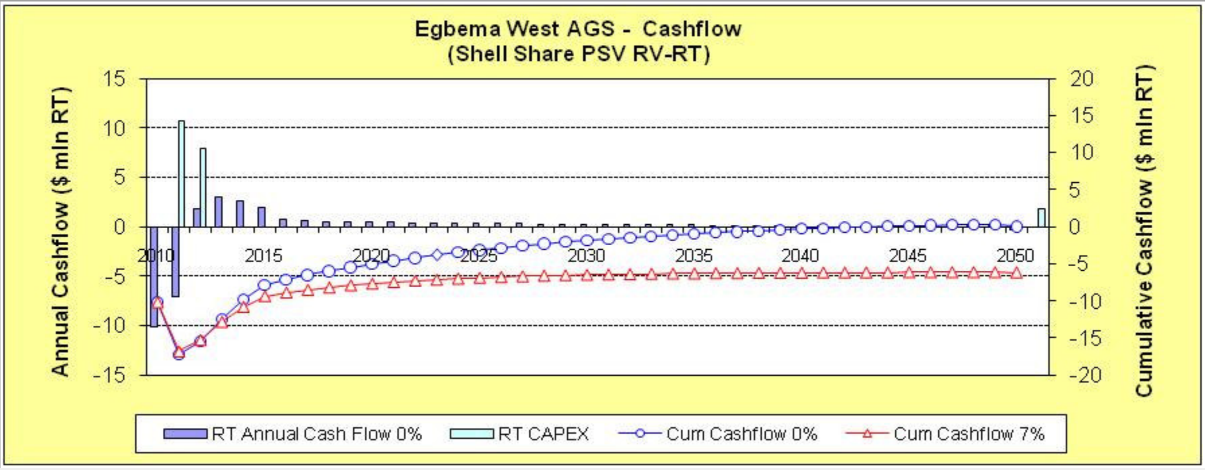
Business unit and company	The Shell Petroleum Development Company of Nigeria Limited (SPDC)
Group equity interest	100% in SPDC, where SPDC has a 30% interest in the unincorporated SPDC JV and NPDC operates this field.
Other shareholders / partners	Nigeria National Petroleum Corporation (NNPC: 55%), Total EP Nigeria (TEPNG: 10%), Nigeria Agip Oil Company (NAOC: 5%) & Nigerian Petroleum Development Company (NPDC, operator)
Business or Function	Exploration & Production (EP)
Amount	US$12.35mln in addition to the pre-FID Capex of $ 7.16 mln previously approved, bringing the total to $19.51mln (Shell share, 50/50, MOD)
Project	Associated Gas (AG) Solution for Egbema West being Phase 1 of the Egbema Development project

Main commitments $mln (MOD)

	$MLN (50/50 MOD)			
Description	**Pre-FID IP Shell Share**	**This Proposal**	**TOTAL Shell Share**	**TOTAL 100% JV**
Access Roads (Prorated Costs)	0.19	0.00	0.19	0.63
AG Solution for Egbema West	6.97	8.27	15.24	50.78
25% Contingency on total SS	-	3.61	3.61	12.02
Sub Total -	**7.16**	**11.87**	19.03	63.44
Sub total - SCD (OPEX)	-	0.48	0.48	1.59
Total (50/50)	**7.16**	**12.35**	19.51	65.03

Source and form of financing	The JV partners will fund this investment and Shell share capital expenditure will be met by SPDC's own cash flow and/or the existing shareholder facility. Formal JV partners' approval will therefore be obtained.

Summary cash flow



Summary Economics

Summary Economics	NPV7% (USD mln)	RTEP (%)	VIR7%
Low case SV RT10	-7.62	N/A	-0.42
Base Case RV RT10	-6.17	N/A	-0.34
High case HV RT10	-3.62	3	-0.20

Section 1: The proposal

Management Summary

This Investment Proposal (IP) seeks approval for an additional US$ 12.35 mln (Shell share) [US$ 41.16 mln, 100% SPDC JV] to cover the full cost of the NFA Associated Gas Solution (AGS) project in Egbema West flowstation which is to gather circa 8MMsfcd of associated gas (currently being flared) and supply the processed gas to Egbema Power Plant (EPP). The project will protect oil & gas reserves of 6.62MMstb & 20.46 Bcf from production shut in (& de-booking) under flares down.

Under government's Domestic Gas Supply Obligation (DSO) for the Egbema fields, NPDC/SPDC are required to supply 60 MMscfd to Egbema Power Plant (EPP). In addition to the NFA AG a Non Associated Gas development is therefore required to meet such DSO. To achieve an overall economically attractive development a third planned development is envisaged aimed at increasing oil production through dumpflood. All three projects are being pursued under a single DE and BOM as all the gas (including the dumpflood AG) will be under a single GSA. In order to optimize investment in the NAG and Dumpflood projects these are being integrated.

Egbema West AG solution was started as part of SPDC JV's overall flares down project. A pre-FID IP was approved in 2007 and the project scope was included in a multi field contract signed with Makon in September 2008. A pre-FID IP update was approved in December 2008 and under this authorization operator's (NPDC) annual budgets for AG solution are being approved. End 2011 is the flare down deadline that NPDC targets for the AG solution. The power station is scheduled to be operating before end 2011 with supplies from Addax Ozombe field. In the period before Egbema West NAG is on-stream (Q1 2013+) the AG evacuation will require that the EPP is also receiving gas from Ozombe. NPDC is keen to drill the NAG well required to feed the EPP but a key item delaying SPDC support for this is a lack of GSA terms (and in particular agreement of gas specification with the EPP).

Although the Egbema West NFA AG Solution proposed in this IP is by itself not economic the Egbema-West NAG and Egbema-West Dumpflood projects that are being matured for later FID consolidated with the NFA AGS give positive results. Preliminary economic evaluation of the field considering the three activities of NFA AG Solution, NAG & Dumpflood, indicates NPV7% 48.7 USD mln for the overall development (see **Table 3, and** for summary and further details see **Attachment 1**).

Section 2: Value proposition and strategic and financial context

Value Proposition: The objectives of the project are to **(1)** secure continued production from the affected fields, in compliance with statutory requirements for non-routine flaring of associated gas, thereby avoiding shut in **(2)** put gas previously flared to productive use by feeding it to Egbema Power Plant in accordance with a government imposed DomGas obligation and government's power priorities **(3)** enable the other parts of the planned development to be pursued for an overall economic benefit that meets government and the major shareholder's plans for flares down and increasing domestic power supply **(4)** mitigate risk of DSO penalties.

From SPDC perspective specifically the value proposition includes to support the Joint Venture and retain the ability for SPDC to participate in the overall value adding field development envisaged while avoiding the negative consequences of withdrawal.

Strategic & Financial Context

The Egbema, Egbema-West and Ugada fields are located in SPDC JV's OML 20 in the seasonally flooded land area of the Niger Delta, some 75 km North of Port Harcourt. Egbema-West field was discovered in 1965 and to date 21 wells have been drilled, penetrating seven hydrocarbon-bearing sands (6 oil & 1 gas). It came on stream in 1974 and reached a peak production of 35 Mbpd in 1980.

Two flowstations Egbema and Egbema West are producing this field. Egbema flow station currently has no AG Solutions, as previous studies could not recommend an economically viable solution. Only Egbema West flowstation is covered by this plan, and further oil development studies in Egbema will be required to address the Egbema f/s AG Solution issue. The current Egbema West field production is ca 3.8 Mbopd and 8.8 MMscf/d of associated gas.

The operatorship of Egbema, Egbema-West and Ugada fields has been transferred to NNPC, which operates through its subsidiary Nigeria Petroleum Development Company (NPDC). A side-letter to the SPDC JV Joint Operating Agreement (JOA) to formally transfer operatorship to NNPC was executed in May 2006 and a Technical

Support Agreement (TSA) between SPDC and NPDC in February 2007. Full takeover of the operatorship of the field will take place after NPDC has put in place all requisite HSE and other management systems, which is planned by mid 2010.

The regulator has identified a Domestic Gas Supply Obligation (DSO) for NPDC to supply 60 MMscf/d to the Egbema Power Plant (EPP), which is a Federal Government 3*112.5 Mw capacity thermal power plant with a requirement for 100 MMscf/d gas. Addax Petroleum has a DSO to supply the balance of 40MMscf/d from its Ozombe fields. NNPC has made available specific funds to pursue DomGas projects to be undertaken by SPDC JV and because of the NPDC operatorship this project is expected to receive all required allocations.

To meet its DSO NPDC plans to gather additional 12MMscf/d from a further development of 10MMstb/d from the G1000X reservoir (G1000X dumpflood project). The balance of its obligation to Egbema Power Plant (EPP), circa 40MMscf/d, is expected to come from E7000X NAG development. The NAG development is one well and 50MMscf/d capacity plant to provide security of supply against fluctuation in AG gas.

SPDC withholding agreement to undertake investment in AG Solution by the JV at the OPCOM (where unanimity is required) would initially frustrate government's plans to gather previously flared gas sources and increase power generation in the politically important Niger Delta. Ultimately SPDC is only a 30% shareholder and the eventual outcome would likely be that the other partners move ahead with the investment, so leading to potential conflict over **(1)** SPDC's lack of support for government and NNPC efforts to implement flares down and supply gas for power and **(2)** SPDC's forfeiture of entitlement to ongoing production or right to participate in future investments. There is a high risk of SPDC isolation from the other 70% partners with Total and NAOC agreeing to pursue the AG solution as part of the overall field development.

Summary Economics

The base case economics for this proposal was evaluated on a forward-look basis using the 50/50 (Pre-FID, FID) cost and the NFA production forecast (Oil and AG) of Egbema, Egbema West and Ugada fields. The base case economics assumes the AG solution will be in place by June 2012 as per BP09, prior to which all AG produced is flared and subject to the flare penalty of $3.5/Mscf. Gas gathered from the fields once AGS is in place is sold to the Egbema Power Plant (EPP).

The Federal Government of Nigeria recently approved a new pricing regime for Domestic Gas to Power by the Federal Government of Nigeria. Sensitivity has been evaluated using the new price regime.

The following other sensitivities were evaluated

1. No AG investment but with continuous flaring without penalty until shut down at the end of 2011.
2. No AG investment but with continuous flaring while paying associated flare penalty until shut down at the end of 2011.
3. No AG investment with continuous flaring while paying associated flare penalty for the entire life of the project
4. Invest in AGS but no flare penalty is paid. Gather gas when AGS facility is in place
5. Base case with no flare penalty prior to AGS being in place
6. Base case with 80% Compressor availability
7. License expiry in 2019
8. High CAPEX (Base case +20%)
9. Two year oil and gas production deferment to 2014 (as NFA gas produced is insufficient to power the EPP)
10. Two year gas evacuation deferment to 2014 (AG produced prior to 2014 is flared)
11. Project full life cycle

See the economics grid below for full details

The base case yields a NPV7% $-6.2mln RT and VIR7% -0.34. It is pertinent to recognize that the Egbema AGS project facilities will be leveraged by the Egbema Dump flood project, which comes on stream in 2014. The added value from the AGS project to the Dump flood project is approx. $0.7mln.

Table 1: Economics Grid (Shell Share)

PV Reference Date: 1/7/2010	**NPV (S/S $ mln)**		**VIR**	**RTEP**	**UTC (RT $/boe)**		**Payout-Time (RT)**	**Maximum Exposure (RT)**
Cash flow forward from: 1/1/2010	**0%**	**7%**	**7%**	**%**	**0%**	**7%**	**yyyy**	**$mln**
Base Case								
SV ($50/bbl & NGMP SV)	-2.95	**-7.62**						
RV ($60/bbl & NGMP RV)	0.03	**-6.17**	-0.34	N/A	11.23	17.79	2044	18.38(2011)
HV ($80/bbl & NGMP HV)	5.19	**-3.62**						
BEP (RT $/bbl)								
Sensitivities (using RV)								
No AGS, no flare penalty. Shut in 2012		**0.94**	N/A				N/A	0.09 (2010)
No AGS, pay flare penalty. Shut in 2012		**-1.42**	N/A				N/A	1.45 (2011)
No AGS, pay flare penalty. No shut in		**-4.80**	N/A				N/A	8.54 (2011)
Base case with no flare penalty prior to AGS		**-4.15**	-0.23				2029	17.31 (2011)
Base case with 80% compressor availability		**-7.51**	-0.41				N/A	18.38 (2011)
Licence expiry 2019		**-8.07**	-0.44				N/A	18.38 (2011)
High Capex		**-7.95**	-0.37				N/A	21.51 (2011)
2 year production deferment		**-5.36**	-0.30				2032	17.92 (2011)
2 year gas evacuation Delay		**-8.00**	-0.44				N/A	18.38 (2011)
New Gas to Power price		**-5.52**	-0.30				2034	18.38 (2011)
Life cycle		**-6.33**	-0.35				2048	18.53 (2011)

Note: Payout time is based on undiscounted cashflow

Table 2: Key Project Parameter Data Ranges (Shell Share)

Parameter	**Unit**	**Bus Plan (RV)**	**Low**	**Mid**	**High**	**Comments**
Capex (MOD)	US$ mln	23.1	na	18.9	22.2	
Production Volume	mln boe	2.8	na	2.9	na	
Start Up Date		Jun-12	na	Jun-12	na	
Production in first 12 months	mln boe			0.5		

Economics Assumptions:

- AGFA Fiscal regime applied.
- Gas will be sold to Egbema West Power Plant in the eastern domestic market at the prices shown in Chart 2.
- Base case assumes 95% compressor availability for gas supply and AG gas is consumed by the power plant as base load without interruption
- Flare Penalty of US $3.5/mscf non-tax deductible.
- Egbema-West fixed Facility Opex $0.28mln/yr SS applied
- 10% Cumulative CAPEX (RT) applied as abandonment cost.
- SCD cost of $0.48mln SS applied
- GHV of 1000Btu/scf was used for Domgas.
- NDDC Levy of 3% total investment.
- Education tax of 2% assessable profit
- High Capex applied only to forward expenditure; also applies where capex for access road is borne only by the AG solution project.

Chart 1: Tornado plot for Egbema West AG Project NPV 7% ($mln)

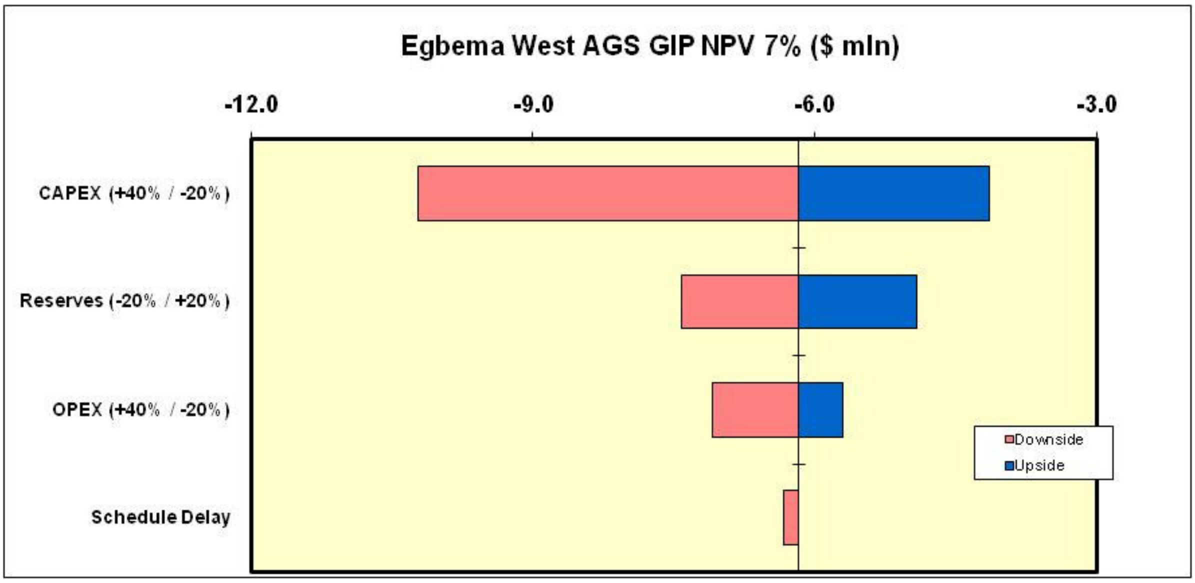


Chart 2: SPDC (Producer) share of Domestic Gas Price trend and PSV

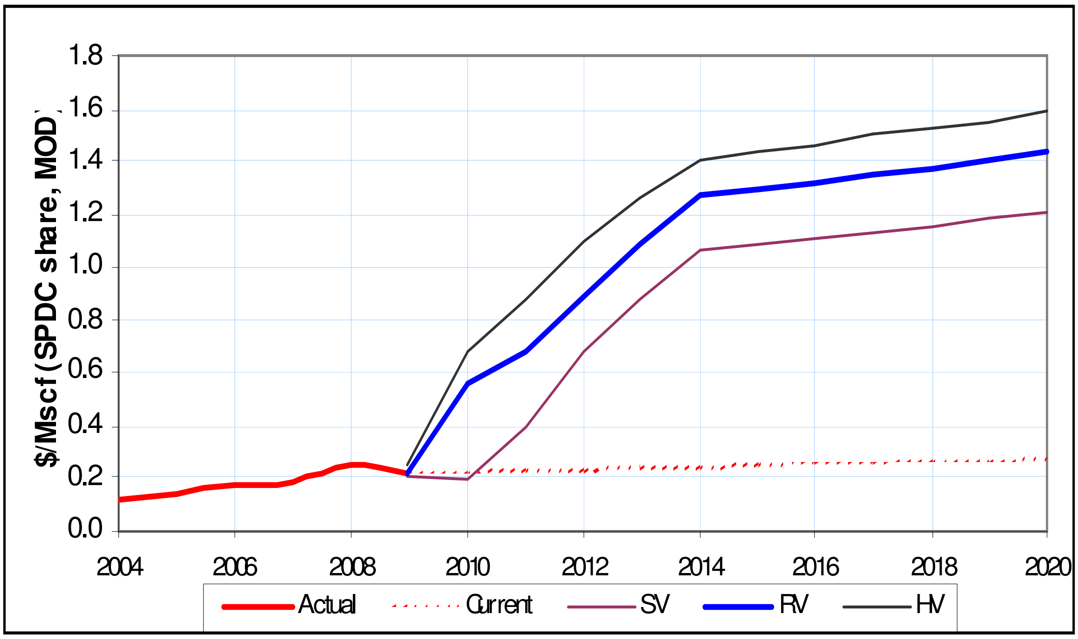


Table 3: Preliminary Economics grid of the Consolidated NDF/NAG and NFA AGS Project

Summary economics Integrated project	NPV7% (USD mln)	VIR7%	UTC 7% US$/Mboe	RTEP
$60/bbl, Previous NGMP gas price (Pre May 2010)	48.7	0.47	7.9	18%
$60/bbl oil, New FGN gas price(May 2010)	61.6	0.59	7.9	20%

Section 3: Risks, opportunities and alternatives

Risks

1. HSE & Security

A key project driver is the environmental benefit of achieving flares down by securing a productive use for the gas. Safety risks include transport and construction related risks during project execution. NPDC is field operator with attendant risk associated with a non-operated venture (NOV).

Mitigation: Environment, Social & Health Impact Assessment *(*ESHIA) studies have been carried out establishing the impacts. Plans to limit the impacts have been developed and captured in an environmental management plan (EMP). These are in line with the Engineering and Major Projects HSE MS that ensures that the identified HSE risks are managed to a level that is ALARP in the course of project execution. SPDC is conditioning its support of further development of Egbema on completion of handover of operatorship including key HSE and competence development actions.

2. Risk of non-completion of NAG and/or Dumpflood

There is an exposure to field shut and production deferment if neither **(i)** the NAG project is completed nor **(ii)** Addax is supplying gas to EPP however the economics are not very sensitive to the resultant oil deferment as quantified above. There is also the risk that AG solution is not followed by a Dumpflood investment, which is the economically attractive part of the development.

Mitigation: For NNPC and government the Egbema NAG supply operated by NPDC is strategic and will ultimately be pursued. Government has full political and economic exposure to the power station investment and it is also likely to exert pressure for Ozombe supplies.

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3. Petroleum Industry Bill & Fiscal changes to Associated Gas Framework Agreement:

Considerable uncertainty persists over if and when a Petroleum Industry Bill will be passed and the terms that may result. It is possible that the federal government may abolish the Associated Gas Framework Agreement (AGFA) so exposing the project to removal of the fiscal benefit for associated gas. Government policy is understood to be still supportive of continuation of AGFA for committed projects including oil protection projects.

Mitigation: Efforts are being made to reclassify the project as oil protection rather than a gas project. Engagement with NAPIMS in this regard seems positive.

4. Risk of mismatch between timing of gas supply and market demand:

The EPP is substantially built with turbines delivered to site and planned to be completed before the earliest feasible completion of the AG solution project (mid 2011 vs. Q4 2011). A reputation risk exists for being late with the gas supply to the power plant and government also threatens significant penalties for failure to meet Domestic Gas Supply Obligations which are identified for this specific field where NPDC is operator as opposed to SPDC JV obligations overall.

On the other hand the EPP is the only non-flare outlet for the gas. There is no completion guarantee for timely EPP start up and no GSA is in place to secure Take or Pay revenues. Negotiations are only now starting to gain traction with NIPP after difficulty in identifying an empowered counterparty and reliance by NIPP on government DSO measures in place of mutual agreement.

It has also recently become apparent (as overall progress on the NGMP has progressed and SPDC has stepped up its efforts to bring NIPP to the table over a GSA for Egbema) that without consultation with the gas suppliers the gas turbines purchased and delivered to the EPP site do not match with the gas specification anticipated in the NFA AG project. Also a 112.5 Mw turbine cannot be driven solely by the 8 MMscf/d to be provided by NFA AG. Therefore AG evacuation requires that EPP is not only complete and operational but also receiving gas from Addax or from Egbema's NAG project.

Mitigation: Once the EPP is operational the volume at risk is mitigated by NFA AG gas being part of the baseload generation supply. Owing to the need to resolve the specification issue SPDC is seeking to delay NPDC's drive to invest in drilling a NAG well in order to permit resolution of the detailed definition of facilities that are required. These could include LPG extraction but SPDC would like to avoid the gas to power chain being reliant on an LPG extraction plant and evacuation from there of LPG. Other technical solutions are therefore being investigated including pre-heating of the gas supply at EPP.

5. <u>Gas specification</u>
There is a risk of delay and potentially increased facilities requirement and cost for the NAG/Dumpflood project according to the gas specification agreed with the EPP.

Mitigation: Negotiate a satisfactory specification in the GSA. EPP current demand specification is for subsea pipeline systems operating at very low temperatures, which is unnecessary for point-to-point delivery to EPP.

6. <u>Lack of NNPC funding:</u>
SPDC projects have been continually handicapped by lack of sufficient year on year budget provision by NNPC.

Mitigation: This field is operated by NNPC through its subsidiary NPDC and the partners fund NPDC by direct cashcall. NNPC treat projects destined to supply IPP investments as a first line charge in their annual budget and NNPC can be expected to ensure this NPDC project receives funds.

7. <u>Contracting & Nigerian Content Development</u>

Implementation of the Nigerian Content Development (NCD) directives is now a challenge for all projects. Any delays of execution contracts approvals process due to delays in JV/Mgt approvals will impact the project delivery date.

***Mitigation**:* In-country fabrication will be considered for the equipment skids. Upon mobilization, the contractor's quality management system, work methods and procedures will be reviewed. SPDC will provide increased supervision and monitoring. Regular engagement with NAPIMS/NCD/Mgt and other JV partners. A NAPIMS/NPDC representative will be requested as a part-time member of the project team. It is expected that NPDC being a subsidiary of NNPC like NAPIMS/NCD will exert its power of influence on its co subsidiary. Compliance with the recently introduced legislation will be checked.

8. <u>Cost Escalation:</u> The Makon-Propak contract is already approved and in place. Brownfield integration scope is the major ticket item not covered by firm bids. FUSD 19.5mln is the Makon EPIC amount (pre-FEED). Tendency for scope creep and cost escalation from brownfield integration works.
Mitigation: A Variation Order will be given to the contractor on this additional scope using the extant contract rates.
However, the following provisional amounts were made in the company estimate as mitigation: FUSD 15.5mln allowed in cost estimate for brownfield integration scope,
FUSD 8.5mln for Owners costs which comprises of project management and staff salaries,
FUSD 12mln for 25% contingency as allowed for a level 2 (pre-FEED estimate) with application of 2 % on these for inflation costs

9. <u>Community interfaces and security issues:</u> These are particularly significant in Niger Delta areas and the risk persists despite the government's amnesty programme that has reduced incidence of armed attacks and sabotage of the oil export pipeline systems.
Mitigation: The project schedule has incorporated this risk and the project security plan will be in accordance with SPDC corporate security objective/plans. Community/local government engagements have commenced. Provision has been made for community assistance/development programs within the project costs and in accordance with the GMoU.

<u>Opportunities</u>
(a) Demonstrate SPDC's value to the stakeholders and principally NNPC and government in the delivery of a project that is on the frontline of 3 key government objectives: **(i)** to develop an adequate power supply to ensure Nigeria's ability to develop as a modern economy by 2015 **(ii)** to achieve flares down by 2011. **(iii)** to create National Upstream Oil sector where NPDC is the first wholly owned subsidiary of NNPC created to that effect.
(b) Booking of undeveloped reserves
(c) Local fabrication capability building in line with Nigerian Content Directives.

Alternatives considered

1. SPDC withdraws from funding the investment in AG Solution.

The implications for SPDC of withdrawing itself from the ongoing AG solution investment for which it is managing the contractor and that is required to keep the field operational are difficult to predict but likely to be serious.

(a) Project continuity & SPDC's role. There are contractual provisions in the JOA for SPDC to support transfer of operatorship of SPDC JV assets to NNPC. Since 2007 (when SPDC received approval for its pre-FID investments in AG solution) it has been diligently pursuing the project. SPDC was identified, as the outgoing operator, to lead the execution of the AG project while future development investments would be executed by NPDC (with SPDC support).

AG solution activities are currently being executed under a contract executed by SPDC with Makon-Propak. A project crisis caused by Shell withdrawing funding part way through a project would damage its reputation as a reliable partner and could require significant future management attention to contain the consequences. It would also undermine SPDC's position on other projects where it suffers from the impacts of NNPC funding shortfalls on projects in execution.

(b) SPDC forfeiture of production entitlement. A decision by SPDC not to fund the remaining amounts to complete the AG solution would almost certainly not result in cancellation of the project but in ultimately the other partners proceeding under NPDC operatorship to complete the project and secure the future of the field.
Without AG solution crude cannot be lifted and SPDC exit from the project could lead to SPDC being required to buy itself back into the project later (at a premium) to participate or a call for it to forfeit its claim on future production, cashflows and potentially future developments. SPDC sunk costs, including those to date on the AG solution, would be at risk.

(c) Costs of disagreement and dispute.
Since the project will proceed, partners may view a choice by SPDC not to continue funding its share of the project as the equivalent of default on a "committed" JV project and a different view of the way forward under the JOA could ensue. Delay and extra costs with contractors introduced as a result of SPDC withdrawing might become subject to disagreement. Also after the issuance of a gas purchase order and a period for GSA negotiations there is a risk of DSO penalties, which could cause a disagreement between partners over their application.

(d) Shell's commitment to greenhouse gas emissions reduction
Explanation of SPDC's refusal to support (with its 30% share of funds) the JV in completing this project on a field where NNPC (and other partners) will fund it could raise questions over Shell's commitment to GHG reduction. Lack of matching funding by NNPC can complicate SPDC's response to flares down as operator but in this case it would be SPDC not matching funding.

2. SPDC seeks to exit from the field and its future development

Given the restrictions under the JOA and the issues facing the Egbema-Egbema West field monetisation of SPDC interest is not a realistic alternative in the available time frame.

Section 4: Carbon Management

The purpose of this project is to limit green house gas emissions to the environment in addition to securing revenue for gas that hitherto has been flared/wasted and the project is being registered with International Finance Corporation (IFC) for access to carbon funding by the World Bank.

There are two identified types of emissions into the air **(1)** leak of hydrocarbons & **(2)** from combustion. All liquid emissions shall be routed to the closest drain header and thence pumped back into the export system, to avoid contact with the environment. In normal operation, leaks from relief valves routed to the flare are infrequent. Flaring shall no longer be routine, as surge vessel gas will be collected and pilot gas is insignificant. Fuel fired engines shall be of low NOx, SOx and low burning to reduce the emission of Green-House Gas (GHG). As much as possible, electric heaters shall be specified instead of fuel fired burners to mitigate the local environmental effect.

Section 5: Corporate structure, and governance
Governance shall be through provisions contained in SPDC JOA, Side Letter and TSA. It should be noted that as this field transfers to becoming NOV for future developments, SPDC plans to continue promoting an ORP style

approach to project approvals to improve on NNPC's reliance on an annual budget approval cycle. SPDC will under the terms of the JOA, JOA Side Letter and Technical Support Agreement provide technical support to NPDC for HSE, operations, development and technical issues.

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

This proposal complies with Group Business Principles, policies and standards. Full functional support covering SCD is provided for in the full project scope. Additionally, there will be a focus on Nigerian Content Development (NCD) as already indicated above. Functional support for this proposal is provided by Finance (Controllers' and Treasury), Tax, Legal, Supply Chain and Commercial functions.

Section 7: Project management, monitoring and review

The Major Projects Team under UIG/T/PD is managing the project on behalf of NPDC. The Project assurance plan is compliant with the ORP. The project team is adequately resourced. Project Quality Management Systems contract will be used to reinforce the Project Management Team as necessary to manage the interfaces during execution.

NPDC is developing a management system that will ensure smooth operation of Egbema-West field. SPDC will deploy some operations staff to NNPC/NPDC and ensure compliance through due diligence as outlined in the JOA/Side Letter/TSA.

Section 8: Budget provision

This project is included in the SPDC's BP09 business plan. SPDC JV partners will be individually cash-called by the operator NPDC.

Section 9: Group financial reporting impact

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

	2009	2010	2011	2012	2013	2014	Post 2014
Total Commitment	0.15	10.75	8.29	0.16	0.16	0	0
Cash Flow							
SCD Expenditure			0.16	0.16	0.16		
Pre-FID Expenditure	0.15	7.01					
Capital Expenditure		3.74	8.13				
Operating Expenditure		0.33	3.07	0.31	0.41	0.36	11.31
Cash flow From Operations		-4.57	-0.13	7.49	-2.31	3.12	18.93
Cash Surplus/(Deficit)		-15.53	-8.61	7.49	-2.31	3.12	18.93
Profit and Loss							
NIBIAT +/-		-30.51	-25.89	-0.11	-23.38	-23.63	-1,069.92
Balance Sheet							
Avg Capital Employed		20.01	58.88	73.94	87.11	118.2	813.8

Section 10: Disclosure

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

Section 11: Financing

From NNPC perspective this investment will be financed as part of the Independent Power Plants (IPP) project basket since the processed AG will be fed into the proposed Egbema Independent Power Plant. SPDC funds its share directly to operator.

Section 12: Taxation

This project is an oil protection project and costs would be deducted in line with the provisions of the Petroleum Profit Tax Act at 85%. Capital allowances at 20% will be claimed over the first 4 years and 19% on the fifth year. In addition, petroleum investment allowance of 5% would be claimed on the capital expenditure.

Section 13: Key Parameters

This investment proposal seeks approval for ***$12.348 mln*** *Shell share, MOD, 50/50 (****$41.60mln*** *100% JV)* for the implementation of AG Solutions for the Egbema West.

Section 14: Signatures

This Proposal is submitted to UIG/T for approval.

Supported by:	For Business approval:
....	....
Bernard Bos FUI	**Bart Lismont** **UIG/T**
Date..../..../....	Date ..../..../....

Initiator: *E. Akin Akinsipe*

Manager, Gas Master Plan/NOV (UIG/T/PG)

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

ATTACHMENT 1

EGBEMA WEST FIELD CONSOLIDATED ECONOMICS

Background:
The Egbema West consolidated projects consist of the Integrated Natural Dumpflood/ NAG and the Egbema West AG solution. The projects are individually being progressed through the ORP funnel. The combined view of the projects is also in the ORP funnel.

Table 1: Egbema West Project

Project scope	*Project completion*
NFA AGS- Install 8 MMscf/d AG handling.	Dec 2011
NDF- Drill and complete 4 dump flood wells, open up shut-in wells, procure and lay flowlines for the wells and install 10 MMscf/d AG compressor and processing facility	Dec 2013
NAG- Drill 1 NAG well on the E7000X structure installs flow line, and 50 MMscf/d gas treatment/dew point facilities to treat the gas.	Dec 2013

Summary Economics-

The Egbema West Integrated Natural Dump Flood/ NAG and NFA AGS projects consolidation was evaluated on a forward-looking basis using the project 50/50 cost estimate and expectation production forecast. Results are shown in Table 2 below.

Table 2: Economics Grid for the Egbema West Consolidated NDF/NAG and NFA AGS (Shell Share)

	Using old NGMP gas price	**Using new Fed Govt Gas Price (May 2010)**
NPV0% (US$ mln)	141.5	166.0
NPV7% (US$ mln)	48.7	61.6
VIR0%	1.16	1.36
VIR7%	0.47	0.59
Tot Oil Prod (MMstb)	17.9	17.9
Tot Gas Prod (Bscf)	90.5	90.5
Tot OPEX (US$ mln)	37.9	37.9
Tot CAPEX excl Aband (US$ mln)	122.0	122.0
UTC0% (US$/boe)	5.3	5.3
UTC7% (US$/boe)	7.9	7.9
RTEP	18.0%	20.0%

Economics Assumptions:

- AGFA fiscal regime assumed for gas sales to Domgas
- Oil PSV of $60/bbl RT10
- Gas sales price for Domestic gas (pre May 2010 and May 2010)
- AG Sales assumed at 85% of AG Produced.
- Condensate taxed as Oil under PPT.
- Project generated activity based OPEX was used.
- 10% of Total RT CAPEX applied as abandonment cost.

- AGFA Fiscal regime applied.
- NDDC Levy of 3% of total Expenditure.
- Education tax of 2% of assessable profit.
- SCD cost of 2% of MOD Capex.
- GHV of 1000 Btu/scf.