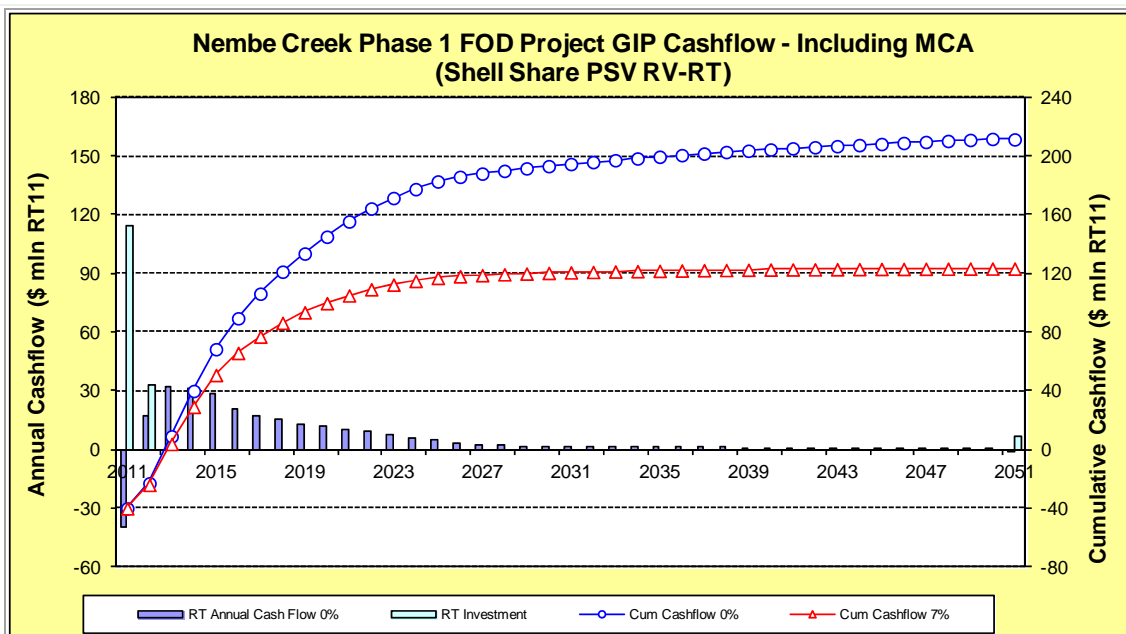


The Shell Petroleum Development Company of Nigeria Limited

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%), TotalFinaElf (10%), and Nigerian Agip Oil Company (NAOC: 5%) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Business | Upstream International (UI) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Amount | <p>The headline size of US\$151.55mln Shell Share MOD 50/50 is being requested for approval in this revised GIP. This is made up of US\$81.13 mln approved in the previous proposal and US\$70.42 mln being requested for in this proposal for the execution of the Nembe Creek Phase 1 project. The headline size is composed of US\$150.05mln CAPEX Shell Share MOD and US\$1.5 mln OPEX Shell Share.</p> <p>The total commitment for Shell of US\$151.55 is made up of Shell Equity contribution of US\$69.87 mln and MCA contribution of US\$81.68mln.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Project | Nembe Creek 'D' Sands Further Oil Development (FOD) Phase 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Main commitments | <table border="1"> <thead> <tr> <th>50/50 MOD</th><th colspan="4">100% JV (\$'mln) MOD_Previous IP</th><th colspan="5">Shell Share (\$'mln) MOD_Revised IP</th></tr> <tr> <th>Description</th><th>Previous IP_JV under MCA Funding</th><th>Incremental IP Request_JV Funding</th><th>Incremental IP Request_MCA Funding</th><th>Total IP</th><th>Shell Share MCA_Previous IP</th><th>Shell Share MCA_Incremental IP</th><th>Shell Share_Equity</th><th>Shell Share_MCA</th><th>Total Shell Share</th></tr> </thead> <tbody> <tr> <td>Flowline & Hookups</td><td>22.12</td><td>-</td><td>-</td><td>22.12</td><td>14.75</td><td>-</td><td>6.64</td><td>8.11</td><td>14.75</td></tr> <tr> <td>Facilities</td><td>4.05</td><td>-</td><td>-</td><td>4.05</td><td>2.70</td><td>-</td><td>1.21</td><td>1.48</td><td>2.70</td></tr> <tr> <td>Wells</td><td>88.42</td><td>-</td><td>101.07</td><td>189.49</td><td>58.95</td><td>67.38</td><td>56.85</td><td>69.48</td><td>126.32</td></tr> <tr> <td>PMT</td><td>-</td><td>5.15</td><td>-</td><td>5.15</td><td>-</td><td>1.55</td><td>1.55</td><td>-</td><td>1.55</td></tr> <tr> <td>Contingency</td><td>7.11</td><td>-</td><td>-</td><td>7.11</td><td>4.74</td><td>-</td><td>2.13</td><td>2.61</td><td>4.74</td></tr> <tr> <td>Total CAPEX</td><td>121.70</td><td>5.15</td><td>101.07</td><td>227.91</td><td>81.13</td><td>68.92</td><td>68.37</td><td>81.68</td><td>150.05</td></tr> <tr> <td>SCD (OPEX)</td><td>-</td><td>5.00</td><td>-</td><td>5.00</td><td>-</td><td>1.50</td><td>1.50</td><td>-</td><td>1.50</td></tr> <tr> <td>Total Cost</td><td>121.70</td><td>10.15</td><td>101.07</td><td>232.91</td><td>81.13</td><td>70.42</td><td>69.87</td><td>81.68</td><td>151.55</td></tr> </tbody> </table> | | | | | | | | | 50/50 MOD | 100% JV (\$'mln) MOD_Previous IP | | | | Shell Share (\$'mln) MOD_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 | 22.12 | - | - | 22.12 | 14.75 | - | 6.64 | 8.11 | 14.75 | Facilities | 4.05 | - | - | 4.05 | 2.70 | - | 1.21 | 1.48 | 2.70 | Wells | 88.42 | - | 101.07 | 189.49 | 58.95 | 67.38 | 56.85 | 69.48 | 126.32 | 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 | 101.07 | 227.91 | 81.13 | 68.92 | 68.37 | 81.68 | 150.05 | SCD (OPEX) | - | 5.00 | - | 5.00 | - | 1.50 | 1.50 | - | 1.50 | Total Cost | 121.70 | 10.15 | 101.07 | 232.91 | 81.13 | 70.42 | 69.87 | 81.68 | 151.55 |
| 50/50 MOD | 100% JV (\$'mln) MOD_Previous IP | | | | Shell Share (\$'mln) MOD_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 | 22.12 | - | - | 22.12 | 14.75 | - | 6.64 | 8.11 | 14.75 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Facilities | 4.05 | - | - | 4.05 | 2.70 | - | 1.21 | 1.48 | 2.70 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wells | 88.42 | - | 101.07 | 189.49 | 58.95 | 67.38 | 56.85 | 69.48 | 126.32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | 101.07 | 227.91 | 81.13 | 68.92 | 68.37 | 81.68 | 150.05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SCD (OPEX) | - | 5.00 | - | 5.00 | - | 1.50 | 1.50 | - | 1.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Cost | 121.70 | 10.15 | 101.07 | 232.91 | 81.13 | 70.42 | 69.87 | 81.68 | 151.55 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Reserves/Resources | 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). | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Production | Incremental oil production from this project peaks at 27.3 Mbopd with associated gas production of 9.7 MMscf/d (8.2 Mbopd and 2.8 MMscf/d SS) by 2013 thus increasing the effective utilization of the new NCTL pipeline and contributing to SPDC's gas supply to NLNG. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Source and form of financing | This investment will be financed through the agreed MCA funding (Nembe Creek phase 1 project is part of the Nembe project bundle under MCA) ref 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 generated funds. The MCA terms do not include PMT CAPEX and all OPEX related expenditures. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



Summary economics

| Summary economics* | NPV (USD mln) | RTEP (%) | VIR |
|---|---------------------|----------|------|
| Project title: Nembe Creek Phase 1 FOD MCA GIP | | | |
| RV (\$70/bbl & \$1.73/mmbtu RT11) | 123.3 | 59 | 0.84 |
| SV (\$50/bbl & \$1.30/mmbtu RT11) | 81.1 | 43 | 0.55 |
| HV (\$80/bbl & \$2.27/mmbtu RT11) | 165.9 | 74 | 1.13 |

*This economics is influenced by the total life cycle production of "Nembe Creek Phase 1 Wells" that have been used in the evaluation.

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 project.

The GIP update is necessitated by: the change in funding scope 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 STOIP 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 and 559.16 Bscf of gas from 64 wells. Undeveloped Expectation oil Reserves of 176.2 MMstb and 130.1 Bscf of gas exist in the field from NEMC phase 1 project and some existing conduits that have not been re-opened post NCTL commissioning. The development was optimised for the D sands by splitting it into two separate phases. The 'D' sands further oil development phases 1 & 2. This GIP covers only the Phase 1 Further Oil Development.

The Nembe Creek 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).

In March 2007, approval was sought and obtained for US\$31.8 mln CAPEX Shell Share (with US\$4.7 mln previously approved in 2006 pre-FID IP) bringing the total approved Shell Share to US\$36.5 mln to drill 8 oil producers (7 horizontal & 1 conventional) in Nembe Creek field in 2007. As at June 2011, no new well has been drilled due to unavailability of the second Swamp Rig. There have been upward revisions of the well costs as shown above.

Drilling operations started in July 2011 with MCA pickup rig, based on the signed June 2011 Short-Term Drilling and Workover Sequence. The first oil is expected in August 2011 and typically, the new wells are expected to produce dry oil from 6 months to 2 years before water breakthrough. All the 8 wells will have gaslift mandrels to allow for gas lift assistance at a later stage.

The 2007 IP economics returned an NPV of \$61.6 mln at a Project Screening Value (PSV) of \$30/bbl, compared to the full lifecycle evaluation of this revised IP at \$81.1 mln NPV (7%) at a higher PSV of \$50/bbl (ref. Summary Economics section, Table 1) 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.

The additional oil will partly arrest the production decline in Nembe Creek field while the associated gas will also contribute to gas sales. It will also lower the bulk water volume flowing through the Nembe Creek Trunk Line (NCTL) considerably. The result of this is higher volume of dry oil for the same volume of gross liquid.

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. This evaluation used the Shell Equity from 2008 to 2012 of US\$69.87 mln (including US\$1.5mln OPEX) and MCA Shell Share of US\$81.68 mln (i.e. Total cost of US\$151.55 mln out of \$232.91mln MOD 100% JV). The Project Management (PMT) CAPEX and SCD OPEX are excluded from MCA funding (treated as JV cost) as they were not originally part of the carry costs under the agreement.

The headline number covers the 2008 – 2012 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
- High & Low reserves
- Concession expiration in 2019
- 1.5% cost mark up as provision for costs dispute by NNPC
- PIB House Version

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 1.

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

| PV Reference Date: 1/7/2011 | NPV (\$/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 | 179.13 | 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 | 1.80 | 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 volume from Aug '11 to July '12 |

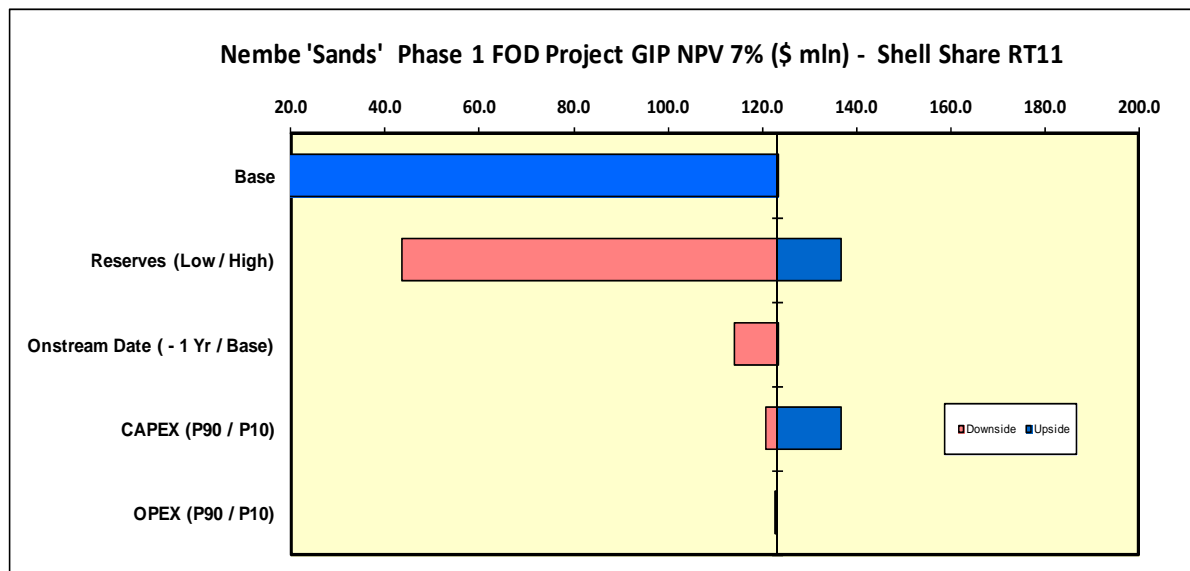


Figure 1: Tornado Plot for Nembe Creek Sands Phase 1 Project GIP

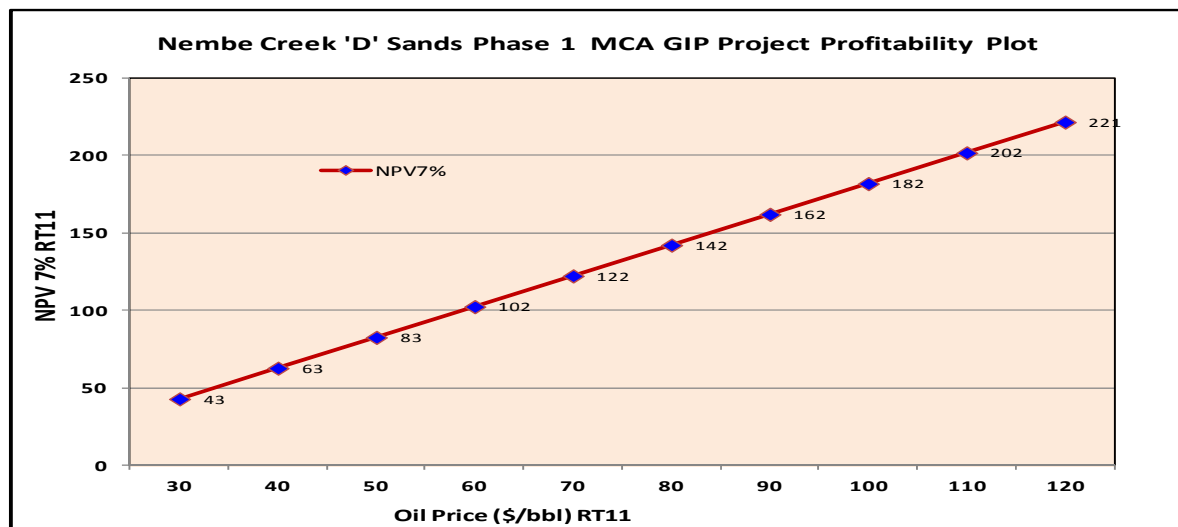


Figure 2: Profitability Plot for Nembe Creek 'D' Sands Phase 1 MCA GIP Project

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 SCD 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 AlternativesKey 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 should be executed strictly 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 insurgency 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. A safe and secure environment relies on the JTF presence. Existing Santa Barbara 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.

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 Greenhouse Gas emissions is at the surface facilities due to increased energy consumption and low compressor uptime. Nembe Creek FOD phase 1 project would raise the 10-year average Green House Gas (GHG) emissions by 31.1KtCO₂eq/year. However, if the compressor uptime, measurement device and rotating equipment improvement proposals set out in the facilities GHG & EM plan are executed successfully the average incremental emissions from the project would be 14.8 KtCO₂eq/year.

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 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. The Project Team will report weekly and monthly to Asset Development Manager and the Development General Manager on the progress of the well delivery activities. There will also be regular reviews with JV Partners. The general project management is as spelt out in the Opportunity Realisation Process (ORP). All significant reviews and follow up actions had been done in the Development and Engineering Teams with all the Team leaders, Discipline Chiefs and Management. Details of the ORP review gates are shown below:

DG3 approval in December 2005
VAR4/DG4 July/November 2006
Spud date: July 2011.

Section 8: Budget provision

This revised Investment Proposal is in line with capital expenditure allocated to the Nembe Creek phase-1 project under the MCA of 2009 though there is shortfall of US\$34 mln (100%) in approved MCA versus current estimated project cost. In line with MCA agreement, NAPIMS will be engaged on the shortfall in order to reach an agreement on how to fund the additional cost.

Learning from recently executed similar projects has been incorporated into this revised budget for realism (e.g. increased well and Facility costs, high Non Productive Time (NPT) and low equipment efficiency). The total headline size being requested now for approval is US\$151.55 mln. The 100% Capex phasing (including SCD Opex of US\$5 mln) at 50/50 MOD estimate is shown in Table 2:

Table 2: NEMC FOD Phase 1 project Cost Phasing MOD 100% JV and Shell Share

NEMC P50 Estimate & Expenditure Phasing

| | JV Funded | | | | | | | | MCA Funded | | | | | | | | PROJECT TOTAL |
|--------------------------------------|-----------|------|------|------|------|-------|------|------|------------|------|------|--------|-------|------|------|------------------|------------------|
| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | |
| Facilities | - | - | | | - | - | | | 1.00 | - | - | 30.33 | 8.36 | - | - | 39.69 | |
| PMT | | - | | | 3.86 | 1.29 | - | - | - | - | - | | | - | - | 5.15 | |
| Wells | - | - | | - | - | - | - | - | - | - | - | 134.42 | 41.54 | - | - | 175.96 | |
| Contingency | - | | | | | | | | - | - | - | 5.33 | 1.78 | - | - | 7.11 | |
| OPEX (SCD) | - | - | | | 3.00 | 2.00 | - | - | | - | - | | | | | 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 | |

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 | Prior Years | 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

Carry expenditure not approved by NNPC is at risk of being non-deductible for tax purposes. The FIRS ruling for MCA's is restricted to MCA's concluded before the end of 2009 and future MCA's requiring prior engagement with FIRS.

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 US\$81.13 mln (SS MCA) previously approved in 2007 GIP and US\$70.42 mln (SS MCA) in this revised GIP(incremental IP). The Shell only Equity and MCA contributions are US\$69.87 mln and US\$81.68mln respectively.

Section 14: Signatures

This Proposal is submitted to the ECMB for approval.

Supported by:

.....
Maarten Wetselaar (FUI)

Date / /

For shareholder approval:

.....
Malcolm Brinded (ECMB)

Date / /

Initiator: _____
Ime Uyouko (UIG/T/DSSE)
Date: 31/07/2011

Lifecycle HCM Forecast Sheet

Nembe Creek Phase 1

Project Location & Country

Version 2.0

Confidential

Project No.: SPDC-11-2582

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

| OIL/NGL [mln bbl] | Date | 2U | 2C Contingent | | PRMS 2P Reserves | | | SEC Proved | |
|----------------------|--------------|--------------------------|---------------------|-----------------------------|-----------------------------|-------------|------|--------------------|-------|
| | | Prospective Resources | Resources Additions | | Additions | | | Reserves Additions | |
| | DG/Key event | (mm)-yy | Prospect | Dev. Pending Post-DG1 | Dev. Pending Post-DG2 | Undeveloped | | Developed | Undev |
| | | | | | Post DG3 | Post-DG4 | | | |
| DG 2 | Oct-05 | | | 26.8 | | | | | |
| DG 3 | Dec-05 | | | -26.8 | 26.8 | | | | |
| FID | Jul-06 | | | | -26.8 | 26.8 | | 13.0 | |
| | | | | | | | | | |
| | | | | | | | | | |
| First HC | 2011 | | | | | -26.8 | 26.8 | -13.0 | 13.0 |
| | 2012 | | | | | | | | 0.0 |
| | 2013 | | | | | | | | 0.0 |
| | 2014 | | | | | | | | 0.0 |
| Perf Update | 2015 | | | | | | | | 6.8 |
| | 2016 | | | | | | | | 0.0 |
| | 2017 | | | | | | | | 0.0 |
| Perf Update | 2018 | | | | | | | | 4.0 |
| | 2019 | | | | | | | | 0.0 |
| Perf Update | 2020 | | | | | | | | 0.0 |
| | 2021 | | | | | | | | 2.9 |
| | 2022 | | | | | | | | 0.0 |
| Perf Update | 2023 | | | | | | | | 0.2 |
| | 2024 | | | | | | | | 0.0 |
| | 2025 | | | | | | | | 0.0 |
| | 2026 | | | | | | | | 0.0 |
| | 2027 | | | | | | | | 0.0 |
| | 2028 | | | | | | | | 0.0 |
| later years | | | | | | | | | |
| Total | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.8 | 0.0 | 26.8 |

| OIL/NGL [bln sm3] | Date (mm-yy) | 2U Prospective Resources | 2C Contingent Resources Additions | | PRMS 2P Reserves Additions | | | SEC Proved Reserves Additions | |
|----------------------|-----------------|--------------------------------|--------------------------------------|-----------------------------|-------------------------------|----------|-----------|----------------------------------|-----------|
| | | Prospect | Dev. Pending Post-DG1 | Dev. Pending Post-DG2 | Undeveloped | | Developed | Undev | Developed |
| | | | | | Post DG3 | Post-DG4 | | | |
| ARPR 31.12.2009 | before last | | | | | 30.3 | | 13.0 | |
| ARPR 31.12.2010 | last | | | | | 30.3 | | 18.3 | |

| GAS [bln sm3] | Date | 2U Prospective | 2C Contingent Resources Additions | | PRMS 2P Reserves Additions | | | SEC Proved Reserves Additions | |
|------------------|---------|-------------------|--------------------------------------|-----------------------------|-------------------------------|----------|-----------|----------------------------------|-----------|
| | (mm)-yy | Prospect | Dev. Pending Post-DG1 | Dev. Pending Post-DG2 | Undeveloped | | Developed | Undev | Developed |
| | | | | | Post DG3 | Post-DG4 | | | |
| DG/Key event | | | | | | | | | |
| DG 2 | Oct-05 | | | 0.27 | | | | | |
| DG 3 | Dec-05 | | | -0.27 | 0.27 | | | | |
| FID | Jul-06 | | | | -0.27 | 0.27 | | 0.20 | |
| | | | | | | | | | |
| | | | | | | | | | |
| First HC | 2011 | | | | | -0.27 | 0.27 | -0.20 | 0.20 |
| | 2012 | | | | | | | | 0.00 |
| | 2013 | | | | | | | | 0.00 |
| | 2014 | | | | | | | | 0.00 |
| | 2015 | | | | | | | | 0.00 |
| | 2016 | | | | | | | | 0.00 |
| | 2017 | | | | | | | | 0.00 |
| | 2018 | | | | | | | | 0.00 |
| | 2019 | | | | | | | | 0.04 |
| | 2020 | | | | | | | | 0.00 |
| | 2021 | | | | | | | | 0.00 |
| | 2022 | | | | | | | | 0.03 |
| | 2023 | | | | | | | | 0.00 |
| | 2024 | | | | | | | | 0.00 |
| | 2025 | | | | | | | | 0.00 |
| | 2026 | | | | | | | | 0.00 |
| | 2027 | | | | | | | | 0.00 |
| | 2028 | | | | | | | | 0.00 |
| later years | | | | | | | | | |
| Total | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.27 | 0.0 | 0.27 |

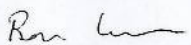
| Gas [bln sm3] | Date (mm-yy) | 2U Prospective Resources | 2C Contingent Resources Additions | | PRMS 2P Reserves Additions | | | SEC Proved Reserves Additions | |
|------------------|-----------------|--------------------------------|--------------------------------------|-----------------------------|-------------------------------|----------|-----------|----------------------------------|-----------|
| | | Prospect | Dev. Pending Post-DG1 | Dev. Pending Post-DG2 | Undeveloped | | Developed | Undev | Developed |
| | | | | | Post DG3 | Post-DG4 | | | |
| ARPR 31.12.2009 | before last | | | | | 0.63 | | 0.20 | |
| ARPR 31.12.2010 | last | | | | | 0.51 | | 0.29 | |

| CHECK | |
|---|----------------------|
| developed reserves additions minus cum production | |
| 2P Reserves Developed | SEC Proved Developed |
| 0.0 | 0.0 |
| 0.0 | 0.0 |
| 0.0 | 0.0 |
| 0.0 | 0.0 |
| 0.0 | 0.0 |
| 0.0 | 0.0 |
| 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 |
| 7.9 | 4.8 |
| 6.9 | 6.8 |
| 6.1 | 5.9 |
| 5.2 | 5.2 |
| 4.5 | 4.5 |
| 3.8 | 3.8 |
| 3.4 | 3.4 |
| 3.1 | 3.1 |
| 2.9 | 2.9 |
| 0.0 | 0.0 |

negative numbers are incorrect

| CHECK | |
|---|----------------------|
| developed reserves additions minus cum production | |
| 2P Reserves Developed | SEC Proved Developed |
| 0.00 | 0.00 |
| 0.00 | 0.00 |
| 0.00 | 0.00 |
| 0.00 | 0.00 |
| 0.00 | 0.00 |
| 0.00 | 0.00 |
| 0.01 | 0.19 |
| 0.03 | 0.24 |
| 0.02 | 0.22 |
| 0.02 | 0.19 |
| 0.02 | 0.17 |
| 0.02 | 0.15 |
| 0.02 | 0.13 |
| 0.01 | 0.12 |
| 0.01 | 0.11 |
| 0.01 | 0.09 |
| 0.01 | 0.08 |
| 0.01 | 0.07 |
| 0.01 | 0.06 |
| 0.01 | 0.05 |
| 0.01 | 0.04 |
| 0.01 | 0.03 |
| 0.01 | 0.02 |
| 0.01 | 0.01 |
| 0.01 | 0.00 |
| 0.01 | 0.00 |
| 0.04 | 0.00 |

negative numbers are incorrect

VP Technical (or VP-X)
Name : Lismont, Bart
Signature : 

For RDL-RE (RXC or RXHM)
Name : Emelle, Chima
Signature : NGCEM3
Digitally signed by NGCEM3
DN: cn=NGCEM3
Date: 2011.06.09 17:21:42
+01'00'

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

ESTIMATE FACT SHEET
Nembe Creek FOD
 Nigeria

Version 2.4 **Confidential**
Approved Cost & Schedule Estimate
 Project No.: **C11020**

Estimator: **Olaribigbe, Elias**

Planner: **Dadi, Musa**

Case: **Base**

Rates of Exchange are as per SI-SX Data Set

Market Scenario: **RV**

Estimate Type: **3**

Cost are in: **USD Millions**

Estimate Start / End: **FID Mar-2007 / RFSU May-2012**

EDM Dates **1-Jul-10**

Category

Total Costs

Facilities

36

<Wells>

180

Owners cost (incl. insurance, pre-FID, Capitalized interest)

6

Market Escalation, EPC Premium & Taxes

2

Contingency

Facilities 18%

<Wells> 0%

7

Inflation

3

P10

P50

P90

Approved Total Project Estimate, MOD

205

233

280

-12%

20%

Assumptions:

OK

Est. and Schedule Premise

\$1 m of Facilities cost estimate is actual spent in 2008. Estimates for the outstanding works are based on awarded ongoing contracts. Wells cost estimate includes wells contingency by Well Engineering in line with agreed SPDC methodology. Surface Facilities P50 and P90 contingencies are deterministically derived using the TECOP tool - they have not been applied on the actuals. Rig availability is a major constraint. There is plan to contract two rigs to achieve project objective. The wells are to be flowed to three flowstations with only the flow to Nembe 4 flowstation via a remote manifold.

Execution Strategy Premise

Use of existing rig and facilities (flowlines and minor facilities installation) call-out contracts

Contract Strategy

Call-out contracts

Key Project Risks

Security/community issues. Poor contractor quality, funding and internal and external interface management

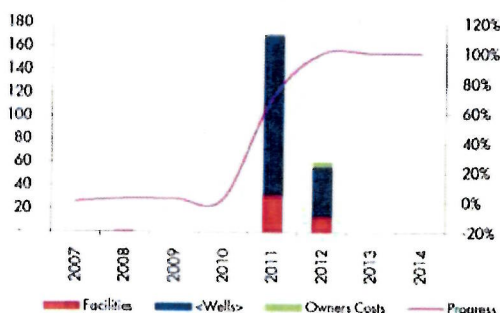
Exclusions

SPDC financing of interest during construction

Benchmarking & Metrics

Estimate is largely based on awarded contracts/POs and existing call-out contracts for similar activities

Capex Phasing and Planned Progress:



Key Schedule Dates:

| Phase | Finish (P50) | Finish (P90) |
|------------------------------|--------------|--------------|
| FID | Mar-2007 | Mar-2007 |
| <Detailed Eng.> | Jul-2011 | Jul-2011 |
| <Procurement> | May-2011 | May-2011 |
| <Construction> | May-2012 | Jun-2012 |
| <Commissioning> | May-2012 | Jun-2012 |
| RFSU | May-2012 | Jun-2012 |

DCAF TA 1
 Date: **5/7/2011**
 Name: **Bensley Andrew**
 Signature: *[Signature]*

VP Project Services
 Date: **5/7/2011**
 Name: **Hans Mes**
 Signature: *[Signature]*

Project Manager
 Date: **22-06-2011**
 Name: **Uyauko Ime**
 Signature: *[Signature]*

Business Opportunity Manager
 Date: **22-06-2011**
 Name: **Nwabueze Vincent**
 Signature: *[Signature]*