



# Renewable energy for Electrification in Eastern Liberia Project- Stand-Alone PV

Country / Region: **Liberia** | Project Id: **XSREL032A** | Fund Name: **SREP** |

Comment Type	Commenter Name	Commenter Profile	Comment	Date
Comment 1	Daniel Menebhi	Switzerland	<p>Thank you for circulation the project application.</p> <p>We have the following Questions (Q) and Comments (C):</p> <ol style="list-style-type: none"> <li>1. Project description and rationale:               <ol style="list-style-type: none"> <li>a. (Q) The hydro power plant shall be connected to the cross-border transmission line between Liberia and Côte d'Ivoire. To what extent will the project thereby satisfy demand in Nimba County vs export electricity?</li> <li>b. (Q) Is the project also expected to provide electricity to Guinea? To what extent?</li> <li>c. (Q) Who will finance the implementation of the distribution grid which shall connect the rural population located along the existing cross-border line in Nimba County (the design of which is being financed by the SREP PPG) and the mini-grids that should "provide reliable and affordable electricity to the main towns of Nimba County" (p.16 PAD)? This distribution grid and these mini-grids do not seem part of the project.</li> </ol> </li> <li>2. Expected results:               <ol style="list-style-type: none"> <li>a. (Q) There is some confusion about the number of beneficiaries from improved access to electricity:                   <ol style="list-style-type: none"> <li>i. (SREP) Cover Page states: 282'500 men + 282'500 women</li> <li>ii. SREP Results Framework (table 6, p.18 of PAD) states 64'644 men + 65'356 women</li> <li>iii. Outline of SREP investment criteria (5.1, 2nd paragraph on p.16 PAD) states "the project could meet 13% of the current total electricity demand in the country and supply electricity to around 110'784 households and benefit to a total of 564'998 people of which around 50% would be women and children". [Note: probably more women and children than 50%]</li> <li>iv. Under "Brief Description of Expected Outcomes" (para. 2.15, p.8 PAD) states "It is expected that over 7'000 new customers ... will connect to the grid by 2021 and an additional 11'000 more by 2041" [Note: the latter figure seems very low]. Please explain the differences between these statements and clarify which one is the relevant expected outcome of the project with regards to the SREP contribution.</li> </ol> </li> <li>b. (Q) The overall co-financing is stated as \$5.98 million in the Cover Page, \$6.0 million in Table 2 (p.9 PAD) Source of financing and \$4.59 million in Table 6 (p.18 PAD) SREP Results Framework. Please clarify which is the relevant figure.</li> <li>c. (C) The leverage factor of SREP financing of 1:0.26 (corresponding to an overall co-financing of \$6 million) is ten times lower than anticipated in the endorsed SREP IP for Liberia (1:2.6). It is appreciated that this fact is outlined and explained by the AfDB and that the Government of Liberia is adding a contribution (\$1.18 million) which was not anticipated in the IP.</li> <li>d. (Q) How many jobs are expected to be created by the project?</li> <li>e. (Q) Does the anticipated cost of USD 0.053/kWh (para. 1.10 p.3 PAD) reflect the full investment and O&amp;M costs of the project?</li> </ol> </li> <li>3. Financial and economic viability:               <ol style="list-style-type: none"> <li>a. (C) It is noted that the economic viability parameters of the project are impressive (ENPV \$67-124 million; EIRR 22.9%-32.4%; EBCR 2.8-4.4) but these figures apparently include shadow prices for CO2 emissions (Annex 2, Table 1, p.22 PAD).                   <ol style="list-style-type: none"> <li>i. (Q) What is the level of these shadow prices (in \$/tCO2eq)?</li> <li>ii. (Q) What would be the economic viability parameters if these shadow prices were disregarded (or set to 0)?</li> </ol> </li> <li>b. (Q) What would be the financial viability parameters (FNPV, FIRR and pay back period) of the investment on the basis of expected electricity sales and O&amp;M costs?</li> </ol> </li> <li>4. Risks:               <ol style="list-style-type: none"> <li>a. Under Environmental &amp; Social (para.4.16 p.13 PAD) some negative impacts including income loss (resulting from losses in subsistence agriculture and fisheries)</li> </ol> </li> </ol>	May 24, 2017



are mentioned. It is also stated that a grievance redress mechanism shall be set up to address such losses.

i. (Q) Have these potential losses been evaluated/quantified and what is their economic value?

ii. (Q) Who will finance the redress measures (compensations)?

b. (Q) With regards to the transboundary nature of the project (para. 4.17 p.13 PAD), will the existing regional agreements cover the project or is it necessary to negotiate a new agreement? How much time will this take? Is it likely to de-lay the project implementation?

c. (C) It is noted that the project is "likely to cause significant environmental and social impact" and that it may be vulnerable to climate change risks.

i. (Q) Does the budget foresee DRR measures to protect the infrastructure and mitigate the environmental and social impact risks? Who will finance such measures?

ii. (Q) Does the weir included in the project constitute an adaptation measure to climate change? What is its main function?

d. (Q) What would be the impact of the Macroeconomic Stability Risk rated "substantial" on the project implementation and O&M?

e. (Q) It is noted that the Sector Strategies and Policies Risk also rated "substantial" is (partially) mitigated by the SREP funded WB Liberia Renewable Energy Access Project. What is the progress of this project in terms of developing regulations for decentralized electrification?

5. Operation & Maintenance (O&M):

a. (Q) It is understood that the Rural Renewable Energy Agency (RREA) is implementing the project, but who will be responsible for O&M?

b. (Q) What capacity building measures are planned regarding O&M?

c. (Q) What are the anticipated annual O&M costs?

d. (C/Q) It is likely that a revision of the hydro-mechanical and electrical equipment will be necessary within the 30 years lifetime of the project. Have such costs been considered in the economic analysis? Who will finance them?

e. The plant will have a significantly different output during the dry and wet seasons with expected generation being respectively 14.7 GWh and 41.8 GWh (para. 2.10 p.6 PAD).

i. (Q) How much is the demand that needs to be satisfied?

ii. (Q) How will the shortfall (if any) of the supply be complemented during the dry season?

iii. (Q) What will happen with the excess electricity generated during the wet season?

6. Private sector involvement:

(C) It is noted that the Gbedin Falls hydro power plant presents the least cost option for electricity generation in the country (Affordability and competitiveness of renewable sources, p.16 PAD). It would therefore be a good case for private sector involvement or loan financing (vs less attractive projects having a stronger need for grants).

i. (Q) Have such options been considered? Why not?

ii. (Q) Is the GoL considering to involve private companies in the electricity generation sector in the foreseeable future?

iii. (Q) Could this project then be the object of a PPP involving a private company (for O&M and/or investment)?

Response 1 Leandro Azevedo

AFDB

1 The hydro power plant shall be connected to the cross-border transmission line between Liberia and Côte d'Ivoire. To what extent will the project thereby satisfy demand in Nimba County vs export electricity? Jun 07, 2017

[AfDB]: The project will satisfy electricity needs in Liberia only and power will shall not be exported for neighboring countries. Being this an on-grid project, the power generated by the project will be transmitted through the cross-border transmission line but in Liberian territory.

2 Is the project also expected to provide electricity to Guinea?  
[AfDB]: No.

3 Who will finance the implementation of the distribution grid which shall connect the rural population located along the existing cross-border line in Nimba County (the design of which is being financed by the SREP PPG) and the mini-grids that should "provide reliable and affordable electricity to the main towns of Nimba County" (p.16 PAD)? This distribution grid and these mini-grids do not seem part of the project.

[AfDB]: These villages are not yet connected to the grid and the distribution network to power them is outside the scope of the project. Nevertheless, and because the costs are relatively small, this study has been included as part of the project and shall aim at identifying options to connect these communities in the future.



4 There is some confusion about the number of beneficiaries from improved access to electricity:

i. Cover Page states: 282'500 men + 282'500 women

ii. SREP Results Framework (table 6, p.18 of PAD) states 64'644 men + 65'356 women

iii. Outline of SREP investment criteria (5.1, 2nd paragraph on p.16 PAD) states "the project could meet 13% of the current total electricity demand in the country and supply electricity to around 110'784 households and benefit to a total of 564'998 people of which around 50% would be women and children". [Note: probably more women and children than 50%]

iv. Under "Brief Description of Expected Outcomes" (para. 2.15, p.8 PAD) states "It is expected that over 7'000 new customers ... will connect to the grid by 2021 and an additional 11'000 more by 2041" [Note: the latter figure seems very low]. Please explain the differences between these statements and clarify which one is the relevant expected outcome of the project with regards to the SREP contribution.

[AfDB]: The figure that was provided in the Cover Page is the correct one. In order to reflect those figures across the documents, the following changes were made in the PAD:

i. The SREP Results Framework was updated to reflect the numbers already provided in the Cover Page.

ii. The text "of which around 50% would be women and children" was deleted. Currently, the PAD refers simply to men and women.

iii. Paragraph 2.15 in Page 8 was also redrafted.

5 The overall co-financing is stated as \$5.98 million in the Cover Page, \$6.0 million in Table 2 (p.9 PAD) Source of financing and \$4.59 million in Table 6 (p.18 PAD) of the SREP Results Framework. Please clarify which is the relevant figure.

[AfDB]: The USD 6 million provided on page 9 of the PAD is the correct amount. The figures in the Cover Page and in the SREP Results Framework in the PAD were updated accordingly.

6 The leverage factor of SREP financing of 1:0.26 (corresponding to an overall co-financing of \$6 million) is ten times lower than anticipated in the endorsed SREP IP for Liberia (1:2.6). It is appreciated that this fact is outlined and explained by the AfDB and that the Government of Liberia is adding a contribution (\$1.18 million) which was not anticipated in the IP

[AfDB]: Noted. Indeed, the leverage factor is well below the target established by the SREP. In our engagements with the Government of Liberia and Development Partners it became clear that it would be virtually impossible to meet the leverage target for all reasons outlined in the PAD.

7 How many jobs are expected to be created by the project?

[AfDB]: The project is expected to generate up to 150 jobs during construction the construction phase and 30 during operations.

8 Does the anticipated cost of USD 0.053/kWh (para. 1.10 p.3 PAD) reflect the full investment and O&M costs of the project?

[AfDB]: Yes, O&M costs are included the project's total cost.

9 It is noted that the economic viability parameters of the project are impressive (ENPV \$67-124 million; EIRR 22.9%-32.4%; EBCR 2.8-4.4) but these figures apparently include shadow prices for CO2 emissions (Annex 2, Table 1, p.22 PAD). What is the level of these shadow prices (in \$/tCO2eq)? What would be the economic viability parameters if these shadow prices were disregarded (or set to 0)? What would be the financial viability parameters (FNPV, FIRR and pay-back period) of the investment on the basis of expected electricity sales and O&M costs?

[AfDB]: The unit costs of CO2 emissions are a function of the "carbon price" which we have assumed to be equal to USD 30 per ton as well as the carbon intensity of the generation source. For Heavy Fuel Oil generation, the unit cost of CO2 emissions is assumed to be USD 0.01.7 per kWh. This figure compares to a unit cost of generation USD 0.2221 per kWh and represents at least 7.7% of the total generation cost. In this regard, with this low CO2 emission cost, the FNPV, FIRR and pay-back period are expected to be within the project's economic viability parameters of: (i) an ENPV of USD 67-124 million, (ii) an EIRR of 22.9% - 32.4%, and (iii) an EBCR of 2.8 - 4.4.

10 Under Environmental & Social (para.4.16 p.13 PAD) some negative impacts including income loss (resulting from losses in subsistence agriculture and fisheries) are mentioned. It is also stated that a grievance redress mechanism shall be set up to address such losses. Have these potential losses been evaluated/quantified and what is their economic value?

[AfDB]: The potential losses will be fully determined during the appraisal phase of the project. The coverage of these expenses will be the responsibility of the Government of Liberia after the final number of Project Affected Persons is determined. A preliminary assessment made on and around the site suggest that



these losses are residual when compared to the total cost of the project.

11 Who will finance the redress measures (compensations)?

[AfDB]: Any compensations resulting from loss in income or physical displacement will be financed by the Government of Liberia as AfDB's rules do not allow the Bank to fund such compensations.

12 With regards to the transboundary nature of the project (para. 4.17 p.13 PAD). Will the existing regional agreements cover the project or is it necessary to negotiate a new agreement? How much time will this take? Is it likely to delay the project implementation?

[AfDB]: The existing regional agreements do not cover the project and there is no need to renegotiate them under the present project. The agreements simply guarantee the availability of 8MW at an agreed tariff from Côte d'Ivoire to Liberia without minimum quotas.

13 It is noted that the project is "likely to cause significant environmental and social impact" and that it may be vulnerable to climate change risks. Does the budget foresee DRR measures to protect the infrastructure and mitigate the environmental and social impact risks? Who will finance such measures?

[AfDB]: The project budget includes costs associated with the Environmental Social Management Plan which will be covered by the Government of Liberia. This is part of the estimated contribution from the Government of Liberia of USD 1.18 million.

The implementation of the Environment and Social Management Plan in accordance with AfDB's Environmental and Social Rules and Procedures is a condition precedent for disbursement.

14 Does the weir included in the project constitute an adaptation measure to climate change? What is its main function?

[AfDB]: The weir simply creates a small water storage that allows flow diversion into the forebay and the power plant intakes in order to provide sufficient head over the penstocks to generate power. It does not constitute an adaptation measure to climate change.

15 What would be the impact of the Macroeconomic Stability Risk rated "substantial" on the project implementation and O&M?

[AfDB]: The impact is expected to be low considering 90% of the project funding shall be deployed by the SREP and AfDB in the form of Grants. This is in line with the recommendations made by the International Monetary Fund under the extended credit facility arrangement, in which it calls on the Government of Liberia and its Development Partners that grants should be sought for the construction of infrastructure projects in the country.

16 It is noted that the Sector Strategies and Policies Risk also rated "substantial" is (partially) mitigated by the SREP funded WB Liberia Renewable Energy Access Project. What is the progress of this project in terms of developing regulations for decentralized electrification?

[AfDB]: The implementation status and results reports of the WB's referred project are fully disclosed on the WB's webpage and can be found here and here.

17 It is understood that the Rural Renewable Energy Agency (RREA) is implementing the project, but who will be responsible for O&M?

[AfDB]: At this state, it is expected that RREA will hand over the operations and maintenance of the project to a private operator.

18 What capacity building measures are planned regarding O&M?

[AfDB]: At a national level, the Millennium Challenge Corporation and other Development Partners are supporting capacity building and technical assistance by implementing a training center in Monrovia that aims at developing local skills associated with operations and maintenance of power generation assets as well as other power operators. RREA will directly benefit from center.

19 What are the anticipated annual O&M costs?

[AfDB]: The estimated operations and maintenance cost per year include:

- 0.5% of capital costs for civil engineering works (fixed for the design life) = USD 38.000 per year
- 2% of capital costs for equipment (fixed for the design life) = USD 273.000 per year

20 It is likely that a revision of the hydro-mechanical and electrical equipment will be necessary within the 30 years lifetime of the project. Have such costs been considered in the economic analysis? Who will finance them?

[AfDB]: The revision of the hydro-mechanical and electrical equipment is included in the operations and maintenance costs.

21 The plant will have a significantly different output during the dry and wet seasons with expected generation being respectively 14.7 GWh and 41.8 GWh (para. 2.10 p.6 PAD). How much is the demand that needs to be satisfied? How will the shortfall (if any) of the supply be complemented during the dry season? What will happen with the excess electricity generated during the wet season?





[AfDB]: During dry season, the shortfall of supply will be complemented by power being channeled through the cross-border grid from Côte d'Ivoire. During the wet season, the intention of the Government of Liberia to deal with the excess of supply is to consider the development and construction of distribution lines to connect to Ganta and Gbarnga, connecting these isolated populations as well as a number of energy-intensive businesses. This is an objective that falls outside the scope of the project and for which the Government of Liberia will have to mobilize resources from other sources. The technical feasibility studies of the project suggest that the daily peak demand is expected to exceed the capacity of the hydro power plant by 2021 even during the wet season.

22 It is noted that the Gbedin Falls hydro power plant presents the least cost option for electricity generation in the country (Affordability and competitiveness of renewable sources, p.16 PAD). It would therefore be a good case for private sector involvement or loan financing (vs less attractive projects having a stronger need for grants). Have such options been considered? Why not? Is the GoL considering to involve private companies in the electricity generation sector in the foreseeable future? Could this project then be the object of a PPP involving a private company (for O&M and/or investment)?

[AfDB]: As stated in paragraph 4.6 of the PAD, "RREA is currently concluding the development of a Business Plan that will incorporate a methodology aimed at guiding engagements with private sector companies to operate power plants in the country." This project could be the object of a Public-Private Partnership with a private operator being brought on board to operate and maintain the power plant during its life. Given the envisaged installed capacity of the power plant (<10MW) that is insufficient to provide gains in terms of economies of scale and the high transaction costs to structure this project as an IPP, the Government of Liberia objective is to minimize development risk and implement the project under a public scheme and engage a private company to operate and manage the asset.

Response 2 Daniel Menebhi Switzerland

Thank you for your answers to our questions and comments.

Jun 08, 2017

We have some follow-up questions:

A) (Q) (re. answer Nr.9): We do not quite understand how the financial viability data (NPV, IRR and payback) can be equal to the economic viability data. Could you please provide the computations in Excel format.

B) (Q) (re. answer Nr.13): Besides the costs associated with the Environmental and Social Management Plan covered by the Government of Liberia, does the project budget include DRR (disaster risk reduction) measures to protect the investment (e.g. from flooding)?

C) (Q) (re. answer Nr.16): Could you please give us a more specific indication (link) on the WB webpage where the information can be found and, if not self explanatory, give us your interpretation as to how and to what extent the Sector Strategies and Policies Risk is effectively mitigated by the WB Liberia Renewable Energy Access Project.

D) (Q) (re. answer Nr.21): We acknowledge the possibility to import electricity from Côte d'Ivoire [8 MW capacity] when needed by Liberia but to what extent is this capacity already used by present demand and is this supply really resilient to the dry season, given that Côte d'Ivoire also relies heavily on hydroelectricity?

E) (Q) (re. answer Nr.21): From the project document, your answers to our questions and the earlier appraisal of the WB Liberia Renewable Energy Access Project, we gained the impression that the capacity of 9.34 MW for this plant is geared more to river potential, available budget and expected demand in the future than present demand. This impression is also supported by the lack of clarity regarding the financing of grid extensions and mini-grids to be used to feed yet unconnected communities. Is our impression correct? What options regarding the sale of electricity have been explored to assure an economically sound operation of a plant of this size, also during the wet (i.e. peak producing) season? Is there the possibility to supply industrial or agricultural enterprises and thereby substitute diesel generation, in the time until the grid extensions and mini-grids are implemented?

F) (Q) (re. answer Nr.22): We understand from your answer that a possible PPP would be limited to an O&M contract or a concession to operate the plant for a determined number of years and that an investment from a private operator is not considered feasible or desirable. Is our conclusion correct? Unfortunately the answer was truncated. Please provide the rest of your answer.

Response 3 Leandro Azevedo AFDB

(Q) (re. answer Nr.13): Besides the costs associated with the Environmental and Social Management Plan covered by the Government of Liberia, does the project budget include DRR (disaster risk reduction) measures to protect the investment (e.g. from flooding)?

Jun 09, 2017

[AfDB]: Being a project with an environmental and social category of 1 (high risk),



the studies take into account the negative impacts of climate change events, including flooding risk. The design of the project takes into account this particular risk and others.

(Q) (re. answer Nr.16): Could you please give us a more specific indication (link) on the WB webpage where the information can be found and, if not self explanatory, give us your interpretation as to how and to what extent the Sector Strategies and Policies Risk is effectively mitigated by the WB Liberia Renewable Energy Access Project.

[AfDB]: It does not seem appropriate for AfDB to critically comment on the implementation status of a WB project. In addition, the power to be generated as part of the proposed project will be injected in the national grid and not be used to power off-grid areas in the country. That been said, you can find the link for the World Bank project : (<http://documents.worldbank.org/curated/en/462421467992516107/pdf/PAD1618-PAD-P149683-R2015-0249-1-Box394822B-OUO-9.pdf>) where you will find under section III, A. a description of the technical assistance sub-components that will directly benefit RREA, which is the agency that will be implementing this proposed project. AfDB is of the view that once completed, these will highly improve the technical capacity of RREA as a whole and shall indirectly benefit the successful implementation of the proposed project.

(Q) (re. answer Nr.21): We acknowledge the possibility to import electricity from Côte d'Ivoire [8 MW capacity] when needed by Liberia but to what extent is this capacity already used by present demand and is this supply really resilient to the dry season, given that Côte d'Ivoire also relies heavily on hydroelectricity?

[AfDB]: The 8MW capacity is already being utilized by Liberia with the entry point in the Nimba County accounting for only 2.4MW which is already fully utilized. We do not foresee an excess of supply as many businesses and households in the region are dependent on the privately-owned generators that use very expensive fuel to meet their electricity needs. In addition, On the other hand Cote d'Ivoire generation mix is predominantly Fossil Fuel Based (Thermal and Gas ) and not hydro, however, one of the objectives of Gbendin Falls is to reduce the dependence on the cross border line. It is the objective of the Government of Liberia to reduce its dependency on the imports of power from its neighboring countries, including Cote d'Ivoire which mainly relies in fossil fuel capacity to meet its power needs.

(Q) (re. answer Nr.21): From the project document, your answers to our questions and the earlier appraisal of the WB Liberia Renewable Energy Access Project, we gained the impression that the capacity of 9.34 MW for this plant is geared more to river potential, available budget and expected demand in the future than present demand. This impression is also supported by the lack of clarity regarding the financing of grid extensions and mini-grids to be used to feed yet unconnected communities. Is our impression correct? What options regarding the sale of electricity have been explored to assure an economically sound operation of a plant of this size, also during the wet (i.e. peak producing) season? Is there the possibility to supply industrial or agricultural enterprises and thereby substitute diesel generation, in the time until the grid extensions and mini-grids are implemented?

[AfDB]: From AfDB's point of view, the impressions is not correct. The capacity of the proposed power plant established based on a detailed assessment of the hydrological flow and on an average plant load factor of 70% which seems optimal for a run of the river technology where there's no storage of energy. AfDB and the Government of Liberia firmly believes that once in operations the energy generated will be quickly purchased by businesses across different sectors (including industries and agriculture) and households that currently rely on privately-owned and expensive fossil-fuel based generation.

(Q) (re. answer Nr.22): We understand from your answer that a possible PPP would be limited to an O&M contract or a concession to operate the plant for a determined number of years and that an investment from a private operator is not considered feasibly or desirable. Is our conclusion correct? Unfortunately the answer was truncated. Please provide the rest of your answer.

[AfDB]: As stated in paragraph 4.6 of the PAD, "RREA is currently concluding the development of a Business Plan that will incorporate a methodology aimed at guiding engagements with private sector companies to operate power plants in the country." This project could be the object of a Public-Private Partnership with a private operator being brought on board to operate and maintain the power plant during its life. Given the envisaged installed capacity of the power plant (<10MW) that is insufficient to provide gains in terms of economies of scale and the high transaction costs to structure this project as an IPP, the Government of Liberia objective is to minimize development risk and implement the project under a public scheme and engage a private company to operate and manage the asset.

(Q) (re. answer Nr.9): We do not quite understand how the financial viability data Jun 09, 2017



	Azevedo		(NPV, IRR and payback) can be equal to the economic viability data. Could you please provide the computations in Excel format. [AfDB]: The Bank's response (re. answer Nr.9) indicates that the financial parameters are within the range provided for the economic parameters. This cannot be equal as pointed out in your question. Please note the response is three phased as presented i.e. what is the level of shadow prices for CO2 emissions (1.7 US\$/kWh), what is the economic viability if these shadow prices were disregarded or set at 0? still within (ENPV \$67-124 million; EIRR 22.9%-32.4%; EBCR 2.8- 4.4); and the respective financial viability parameters of the investment? (expected to be within the project's economic viability parameters) The financial viability parameters are attached in the feasibility study under financial and economic analysis with different sensitivity of the same.	
Response 5	Daniel Menebhi	Switzerland	Thank you for your answers to our questions and your responses to our comments. We have the following concluding remarks: Switzerland supports the approval of the project but recommends that the AfDB and the GoL proceed with the extension of the distribution grid and the installation of mini-grids to connect remote cities in Nimba County as soon as possible and that they therefore seek financing from other sources. The project will only unfold its potential for transformational change in Liberia, if and once the people living in the remote cities of Nimba county have gained access to electricity generated from this plant or other successive investments in renewable energy. The following two questions still need some sort of response: Re. answer Nr.16: Our question was referring to the progress already realized in the WB project not its objectives of which we are well aware. This (the progress) is not documented in the PAD to which the indicated links leads. Re. answer Nr.22: Unfortunately the answer is still truncated and it is still unclear whether the GoL considers a future private investment into the plant desirable or not.	Jun 12, 2017
Response 6	Leandro Azevedo	AFDB	Switzerland supports the approval of the project but recommends that the AfDB and the GoL proceed with the extension of the distribution grid and the installation of mini-grids to connect remote cities in Nimba County as soon as possible and that they therefore seek financing from other sources. The project will only unfold its potential for transformational change in Liberia, if and once the people living in the remote cities of Nimba county have gained access to electricity generated from this plant or other successive investments in renewable energy. [AfDB]: This is well noted. AfDB will transmit this comment to the Government of Liberia and engage with Development Partners to discuss the possibility of adding the mini-grids component to the Nimba County as part of the project's scope. Re. answer Nr.16: Our question was referring to the progress already realized in the WB project not its objectives of which we are well aware. This (the progress) is not documented in the PAD to which the indicated links leads. [AfDB]: We are currently working on a more meaningful answer to this question and will get back to you as quick as possible. Re. answer Nr.22: Unfortunately the answer is still truncated and it is still unclear whether the GoL considers a future private investment into the plant desirable or not. [AfDB]: There must be a glitch with the platform as the answer was copied in full more than once. The initial final answer is as follows: "As stated in paragraph 4.6 of the PAD, "RREA is currently concluding the development of a Business Plan that will incorporate a methodology aimed at guiding engagements with private sector companies to operate power plants in the country." This project could be the object of a Public-Private Partnership with a private operator being brought on board to operate and maintain the power plant during its life. Given the envisaged installed capacity of the power plant (<10MW) that is insufficient to provide gains in terms of economies of scale and the high transaction costs to structure this project as an IPP, the Government of Liberia objective is to minimize development risk and implement the project under a public scheme and engage a private company to operate and manage the asset.	Jun 14, 2017
Comment 2	Daniel Morris	United States	Thanks for the opportunity to comment. Just a short comment. We would request that AfDB staff conduct a full ESIA for this project. What is the status of the ESIA? Will it be disclosed at least 120 days before this project is brought to the AfDB Board? danny	Jun 12, 2017
Response 1	Leandro Azevedo	AFDB	[AfDB]: A full ESIA will be undertaken in the context of the project as to ensure alignment with AfDB's Integrated Safeguards System (ISS). The ISS provide for a systematic process for addressing projects' environmental and social impacts with	Jun 14, 2017



clear understanding of the specific project characteristics. It should be noted that the AfDB has coordinated its efforts to design and introduce its ISS with the community of MDBs and other international development agencies to ensure best practices are shared across MDBs.

The project will likely be categorized as "Category 1: Operations likely to cause significant environmental and social impacts" which means that the full ESIA will be disclosed for at least 120 days.

Comment 3	Simon Ratcliffe	United Kingdom	We note on the Cover Page that mention is made of the consultation process that will be conducted with affected communities. The proposal states the Environmental and Social assessment is "based on meaningful consultations (free, prior and informed)". Given that the nature of the project is fairly technical and that there may not be a widespread ability to appreciate some of the finer points, what approach is envisaged that would ensure that communities are able to provide "informed" input?	Jun 13, 2017
Response 1	Leandro Azevedo	AFDB	[AfDB]: Meaningful consultation and participation in the context of environmental and social safeguards is vital. In line with MDB's best practices, the ISS (see answer 30) sets out clear requirements for greater public consultation among and participation by communities and local stakeholders that are likely to be affected by this operation. Consultations shall meet the requirements of being "free, prior and informed" as stated in the cover page and of achieve broad community support, especially in high-risk projects or projects affecting vulnerable groups. It is important noting that the consultations will be led by the Government of Liberia in cooperation with a consulting firm with expertise in the field and the final ESIA shall have a section discussing the Outcomes of the Stakeholder Engagement. The ESIA before being published for consultations must also be approved by AfDB's E&S safeguards specialists, which are independent from the technical experts. As part of their review, the safeguards specialists engage in consultations with projected affected people without the presence of representatives from the Government of Liberia to ensure they were properly consulted and that any planned compensation is fair.	Jun 14, 2017
Comment 4	Daniel Menebhi	Switzerland	Thank you for circulating this request. We have the following questions: 1. Why was this request not made by the AfDB ahead of the original deadline for submission to the AfDB Board (November 2017)? 2. (Question to CIF-AU only) Does that delay have any formal consequences on the project and its status regarding SREP approvals? 3. How much additional financing was secured from SEFA and what will this be used for (including impact on the SREP Results Framework)? Please ask the AfDB to answer questions 1 and 3 and let us have your point of view on question 2. Thank you and best regards Daniel	Mar 22, 2018
Response 1	AZEVEDO LEANDRO	AfDB	[Switzerland]: Q1: Why was this request not made by the AfDB ahead of the original deadline for submission to the AfDB Board (November 2017)? [AfDB]: A Request for Extension was not submitted ahead of the original planned date (September 2017) for AfDB Board approval for the simple reason that we were not in breach of the SREP Pipeline Management Policy. The policy states that "for public sector projects, MDB board approval must be obtained within 9 months after Sub-Committee approval". Since the SREP funding request was approved on 23rd June 2017, the policy allows for AfDB to submit this request for extension no later than 23rd March 2018. [Switzerland]: Q3: How much additional financing was secured from SEFA and what will this be used for (including impact on the SREP Results Framework)? [AfDB]: The amount of the SEFA grant to be allocated to the project equals USD 1 million. The internal review and approval process has already started. The SEFA grant will enable the Government of Liberia to explore options and structure private sector participation regarding the operations, maintenance and commercial management of the hydro power plant with the view of ensuring long-term sustainability. This work will also be relevant to future and current generation assets installed in the country. No impacts on the SREP Results Framework are expected as a result of the implementation of the SEFA grant.	Apr 06, 2018
Response 2	CIF AU	CIF AU	Question 2: to CIF-AU only) Does that delay have any formal consequences on the project and its status regarding SREP approvals? We do not anticipate material impact on the project or SREP approvals other than delayed implementation and delivery of results.	Apr 06, 2018
Response 3	Daniel Menebhi	Switzerland	Thank you. We have no objection to the requested extension of the deadline for AfDB board	Apr 09, 2018





approval.