

**Appraisals,  
Norwegian Support to Activities  
in the Energy Sector,  
Uganda**

**Final Report**

Oslo, August 2005



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## **Abbreviations**

BFP	Budget Framework Paper
CBP	Corporate Business Plan
EP	Electric Power (division in ERD)
ERD	Energy Resources Department
ERA	Electricity Regulatory Authority
ERT	Energy for Rural Transformation (Program)
ESS	Economic Services Sector
MDGs	Millennium Development Goals
MEMD	Ministry of Energy and Mineral Development
MFPEd	Ministry of Finance, Planning and Economic Development
MTEF	Medium-Term Expenditure Framework
NVE	Norway's Water and Energy Directorate
OD	Norway's Petroleum Directorate
PD	Project Document
PEAP	Poverty Eradication Action Plan
PEPD	Petroleum Exploration and Production Department
PSA	Production Sharing Agreement
REA	Rural Electrification Agency
SPU	Sector Planning Unit
UEB	Uganda Electricity Board
UEDCL	Uganda Electricity Distribution Company Ltd.
UEGCL	Uganda Electricity Generation Company Ltd.
UETCL	Uganda Electricity Transmission Company Ltd.
USD	US Dollars

## **1 Executive Summary**

Scanteam was asked to appraise two projects funded by Norway that are to support activities in the energy sector in Uganda:

- Institutional Cooperation between the Uganda Electricity Transmission Company (UETCL) and Statnett; and
- Strengthening the State Administration of the Energy Sector in Uganda.

### **A. The Energy Sector**

The energy sector is receiving more attention as Uganda's energy problems are becoming more acute and its energy potential more commercially interesting.

The power sector has undergone rapid and profound legal and structural changes over the last several years. Generation, distribution and transmission have been unbundled, with the first two concessioned to private operators. A regulator and a rural power agency have been created.

The petroleum sector has experienced organic growth in its capacities within the existing structures, as focus has been on exploration. Now that Uganda may have found commercially exploitable resources, this sector is also set to undergo changes to adjust to this new situation.

The further changes to the external environment – regional collaboration and energy markets, possibilities for new actors entering with significant energy potential (southern Sudan), makes a modern energy administration more important than ever.

MEMD has formally structured its own objectives and activity plans to be in line with the PEAP. MFPED's "hard" budget constraint further provides incentives to focus on overall efficiency and effectiveness of sector activities.

The rapid changes in the external environment and internal restructurings of the power sub-sector have led to considerable transition costs, and existing unclarities regarding divisions of labour, roles and tasks. These need to be addressed before the sub-sector can fully assume its developmental, management and economic responsibilities.

Norwegian support to the sector is therefore in line with national priorities:

- The support to sector coordination (SWAP) is highly appropriate;
- The power sub-sector requires considerable assistance to improve its overall structure and functioning;
- The petroleum sub-sector also needs support to continue preparing for possible gas and petroleum exploitation.

### **B. Support to Uganda Electricity Transmission Company, UETCL**

The UETCL is facing a rapidly changing external business environment, where its role as single buyer is the most challenging. The recently concluded Management Diagnostic Study is the basis for designing the Corporate Business Plan (CBP), which is setting the strategic objectives for the corporation. Statnett support should be embedded within the CBP.

The *Goal* for the project should be the objective for the power sector set by the Government in its National Budget and Framework Paper. The *Purpose* should be more specific in terms of where UETCL should be at the end of the period, where dimensions covered could include operations management, systems expansion, and return on assets, along the lines of a performance contract between the authorities and UETCL management might include.

*Outputs* and *Activities* are well specified and quite detailed, though they may have to be adjusted to be in line with the CBP.

There is no *organizational capacity* analysis in the document, but this is covered in the Diagnostic Study. What is required is to verify that capacity and UETCL priorities remain such that project implementation can move ahead as foreseen.

*Risk factors* are listed, but no analysis done and no risk mitigation strategy laid out. Since some factors are critical to the satisfactory performance of UETCL, management should put in place such a plan (if one does not already exist), though for obvious reasons this can not be put in the public domain as part of a project document.

*Indicators* and *Means of Verification* are satisfactory as activities with timelines are presented. Baseline information for many key variables are found in the Diagnostic Study. What should be made clearer, is if reporting will in fact cover all the issues, and if reporting will be decision-making oriented rather than simply focus on activities and identification of problems.

*The Budget* on Statnett inputs is by activity, permitting good management. The UETCL budget is not included, and should be as of next year.

*Framework conditions* regarding own planning and donor coordination are being addressed; corruption remains a key problem that should be tracked; HIV/Aids needs to be addressed better.

With these adjustments, the project design is by and large good, so changes are largely editorial and minor.

### **C. Support to the Petroleum Exploration and Production Department, PEPD**

The PEPD is a competent and reasonably well staffed Department. With gas finds, it needs to acquire skills in petroleum exploitation and management. Uganda itself requires a modern legislative and institutional framework. This project will address three key areas: (i) policy, legal and regulatory strengthening, (ii) capacity building, and (iii) technical and economic studies.

The Project Document does not contain a formal LogFrame. It has a confusing structure based on the notion that it is a Programme with four projects, which is neither helpful nor appropriate. There is no formulation of a *Goal*, though this should be the objective for the petroleum sector set by the Government. There is also no *Purpose* provided, but a proposal has been suggested here.

There is a large number of areas and *Outputs* proposed, reflecting an ambitious project. Many of the Outputs are poorly specified, however, and it is often difficult to see if the proposed *Activities*, *Inputs* and *Budget* are realistic. There is also some duplication and hence scope for simplification. While there is some "front loading" of activities, Revenue Management should be given priority and take place earlier.

There is no *organizational capacity* analysis in the document, but the PEPD is considered to have the managerial and technical skills to implement the proposed activity programme. What is lacking is an assessment of *sustainability* in light of probable loss of staff once the private sector grows due to commercially viable gas finds.

*Risk factors* are not provided, but are critical to the viability of the project. Revenue management and concerns with corruption and macro-economic management are key concerns that require willingness to address this issue on a much broader front. A risk management plan ought to be prepared.

*Indicators* and *Means of Verification* are missing, though in many cases better specified Outputs mean these are easy to identify. This should include de-composed timelines by Output. A key factor is the specification of the reporting system, to ensure that management gets actionable and timely data.

*The Budget* for the Norwegian inputs is by area, hence quite transparent, though it is unclear if the sub-budgets are sufficient. Revenue management is seen to require a much broader approach, involving more institutions on both sides, and hence more resources.

The sector needs to include HIV/Aids issues, especially if petroleum exploitation begins, while donor coordination is simple: Norway is the main donor.

Despite the rather harsh comments on the formal preparations of the document, the project itself is critically important as addresses key concerns of the national authorities and potentially for the entire country's economy, has the full ownership of the local partner, is a relatively urgent one, and should move ahead as soon as the various project elements have been addressed.

#### **D. Support to the Energy Resources Department, ERD**

The ERD has few staff, especially in the Electric Power (EP) division which will be central to Norwegian support. The project is to support (i) power sector planning, (ii) power sector financing, and (iii) ERD capacity building, but it is unclear about where it will be placed – in the ERD as such, or the EP. Because of limited own staff, the PD assumes that much of the work will have to be done by external consultants, which is troubling from a capacity building perspective. The consequences and alternative measures are not discussed.

The PD does not contain a LogFrame matrix, has very limited description of what it will in fact do and achieve, has no *Goal* or *Purpose*, and the *Outputs* are fairly general in nature. There are no *Indicators* or *Means of Verification*, though some targets are implicit through the timeline provided. There is a fairly limited *Budget* that provides expected funding per output, but without specifying much the inputs foreseen. This vagueness is in part due to the difficulties of designing a meaningful project under the current uncertainty in the sector, but more could have been done, and in general this project does not yet seem ready for implementation.

There is no *Risk Analysis*, but this is seen as critical given the considerable economic and political interests involved in the sector. One possibility is to establish a Quality Assurance Group to assist the ERD steer the contents of the work through ensuring maximum transparency and consultation in the work.

MEMD needs to decide how it intends to address the need for greater donor coordination, perhaps in line with international "good practice" proposals in the recently concluded SWAP study. MEMD should also consider the Functional Analysis as a further contribution to clarifying the sector's and in particular ERD's future structure, size and focus, and thus required capacities.

One way of bringing these different strands together is that (i) the Functional Analysis takes place during the fall of 2005, (ii) the Terms of Reference for the analysis has as its point of departure the idea that the sector intends to move towards SWAP-like arrangements, though the timeline does not have to be fixed, (iii) the support to ERD begins this fall as a preparatory project, with the intention of having the final project document ready by the end of the year. The PD would then be in line with the recommendations of the Functional Analysis and the SWAP-orientation.

The preparatory project would provide support for the Functional Analysis, do the capacity assessment and develop a capacity building strategy and action plan, define more carefully the studies to be undertaken etc. In essence the preparatory project would help the ERD and in particular the EP to get their "business plans" for the next several years in place, in line with better aid coordination, restructured sector etc.

## **E. Recommendations**

### ***(i) Energy Sector in general:***

1. Norway should suggest to the national authorities that a functional analysis be carried out of the energy sub-sector, and Norway should be willing to finance such an undertaking.
2. Norway could suggest that Statskonsult be invited to lead such an exercise.

### ***(ii) Support to UETCL:***

3. Since the CBP is now ready, it is important that Statnett come to Kampala as soon as UETCL management can accommodate this. The main task should be to update the PD in line with the CBP: enrich the document with more information on how activities will be monitored and reported; greater clarity on UETCL inputs; better risk analysis and risk mitigation plan; and thus a more comprehensive and consistent LogFrame.
4. Statnett should ensure that its mission includes senior business management, to ensure that the Statnett inputs will be in accordance with the final CBP.
5. The project should begin implementation as soon as possible, as UETCL is under pressure to improve performance fast. The revised PD should therefore be processed as quickly as possible, to avoid unnecessary delays.

### ***(iii) Support to PEPD:***

6. A complete LogFrame needs to be elaborated, to specify Goal, Purpose, Outputs, targets (deadlines), Risk Factors, Means of Verification, and – where needed - Indicators.
7. With the LogFrame, possible Output simplification should be carried out, and the Budget revised. In the case of Revenue Management, the budget may have to be revised upwards substantially.
8. Risk analysis is very important. A risk management plan should be produced.

9. Petrad should be the main collaborating partner, but with NPD as a key sub-contractor.
10. The task of upgrading the Project Document should be carried out immediately, since the project is urgent, priority, and in principle has identified well the key areas, activities and expected outputs.

***(vi) Support to ERD***

11. The project should start off as a Preparatory Project during the fall of 2005, with the intention of developing a full-scale PD for implementation as of early 2006. During this preparatory phase a Functional Analysis of the power sub-sector is carried out and the MEMD also takes decisions regarding how it wishes to enhance donor coordination in the sector. The project would support both these processes.
12. When developing the revised PD, attention should be paid to producing a good risk management plan, perhaps including establishing a Quality Assurance Group; defining the Capacity Building Strategy and Action Plan; developing a more detailed budget; and specifying the role of external consultants so that maximum management responsibility remains with the ERD on their use.

## **2 Introduction**

Energy is a priority sector for the development cooperation between Uganda and Norway. During the current program, two new projects have been proposed for Norwegian support: "Strengthening of the State Administration of the Energy Sector in Uganda", and "Institutional Cooperation between Uganda Electricity Transmission Company (UETCL) and Statnett". Both projects are conceived largely as twinning arrangements between the relevant Ugandan institutions and their counterparts in Norway.

The strengthening of the state administration is focused on the Ministry of Energy and Mineral Development (MEMD), where Norway will provide funding to capacity building in the Petroleum Exploration and Production Department (PEPD) and the Energy Resources Department (ERD). The collaboration with UETCL is envisaged to cover virtually the entire corporation.

Both projects were developed during 2004, the first one designed with the assistance of independent Norwegian energy consultants, while the second one has been produced with direct involvement of Statnett.

The need for assistance is clear, as the energy sector is undergoing rapid changes<sup>1</sup>. Uganda is in the forefront in Africa in terms of restructuring the power sector, opening up to a greater role for the private sector and initiating ambitious programs to bring electricity to the rural areas. The country has recently found gas and is hopeful that this may be commercially viable.

The country thus is laying the foundations for a more modern power sector while also hoping to become a hydrocarbon-producing country.

### **2.1 Objectives of the Appraisal**

The purpose of the appraisal is to provide input to the assessment of the proposed projects as well as concrete recommendations on the design of the projects.

More specifically, in light of the priorities and strategies of the Government of Uganda (GoU), Scanteam was to assess the relevance, design and sustainability of the proposed projects. The appraisal report format in Norway's recently updated "Development Cooperation Handbook" is to inform the design of the appraisal report. Particular regard shall be given to the absorptive capacity in UETCL and MEMD, and an assessment of the appropriateness of the proposed Norwegian cooperating institutions: Statnett (Norway's transmission system operator), Petrad (petroleum training and advisory body), the Petroleum Directorate (OD) and the Water and Energy Directorate (NVE). With regard to providing recommendations on the design of the projects, particular consideration was to be given to the following issues:

- LFA Matrix: Relevance of the formulated goals, objectives and outputs towards GoU priorities, and the proposed means of verifying achievement of these.

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<sup>1</sup> There is a somewhat confusing usage of the term "energy" in Ugandan documents. Some times it is used to refer to the full range of energy sources. At other times it is synonymous with "electricity" or "power". The MEMD has four technical departments, two of which are related to petroleum, while a third is called "Energy Resources Department", though it only covers the electricity, new and renewable energy sources sub-sectors. In this document, "energy" will refer to the full energy sector, while "power" will be used to denote the electricity sub-sector.

- Appropriateness of the project administration mechanisms, including reporting requirements.
- The need to manage identified risks.

Full Terms of Reference are attached as Annex A.

## **2.2 Methodology**

The appraisal is based on a review of relevant documents (listed in Annex C) and interviews with key informants.

Interviews were carried out with the Norwegian consultants/staff who had been involved in the development of the projects in Norway before departing for Uganda. During a short week, key informants in the relevant Ugandan institutions, some consultants already engaged in the energy sector in Uganda, and donor representatives were interviewed in Kampala and Entebbe (full list of informants in Annex B).

## **2.3 Structure of Report**

The Report contains four substantive chapters:

- Chapter 3 provides a brief overview of the energy sector, providing the setting for the Norwegian funded projects;
- Chapter 4 looks at the twinning project with UETCL;
- Chapter 5 reviews the capacity building support to the Petroleum Department in the Ministry;
- Chapter 6 assesses the capacity building support to the Energy Department in the Ministry;

In addition are three annexes:

- Annex A: Terms of Reference;
- Annex B: List of Informants;
- Annex C: Documents Consulted.

## **2.4 Acknowledgements and Disclaimer**

The appraisal was done by Mr. Arne Disch of Scanteam/Norway.

The consultant received full support from all Government officials and offices, energy consultants, and other informants contacted, for which he would like to express his sincere thanks. A particular Thanks goes to Mr. Geir Hermansen, the energy adviser in the Norwegian Embassy in Kampala, for his consistent assistance and support during a very hectic field visit.

This report and its findings are the sole responsibility of the consultant, and do not necessarily reflect the views of the Ugandan authorities, the Norwegian Embassy or any other informants listed in the report.

Comments and views on this report are gratefully accepted at [ardi@scanteam.no](mailto:ardi@scanteam.no).

### **3 The Energy Sector**

Uganda's hydrological resources are estimated to have a power potential of over 2,500 MW. The large sites are concentrated along the Nile River while sites for small hydro (0.5-5 MW) are scattered in many parts of the country. Due to low head and large discharge of water, development costs are generally on the high side. Current installed capacity is around 317 MW, while Uganda's Poverty Eradication Action Plan (PEAP, August 2004) estimates the country will have a peak demand of between 411 and 649 MW by 2010. The country is therefore facing a serious shortfall in terms of power generation which is already being felt.

In the longer term, two sites with big electricity generation potential have been identified at Bujagali falls (250 MW) and Karuma falls (200 MW). But the country is also going encouraging rural electrification through local power schemes, which may or may not be linked into the national grid.

The exploration in the western regions of the country has so far led to some gas finds, and some are also hoping to strike oil. Work is underway to assess the commercial viability of the gas reserves.

#### **3.1 Energy Sector Objectives**

The mandate of the MEMD is "to promote and ensure the rational and sustainable utilisation and development and the effective management and safeguard of energy and mineral resources for social and economic development and welfare".

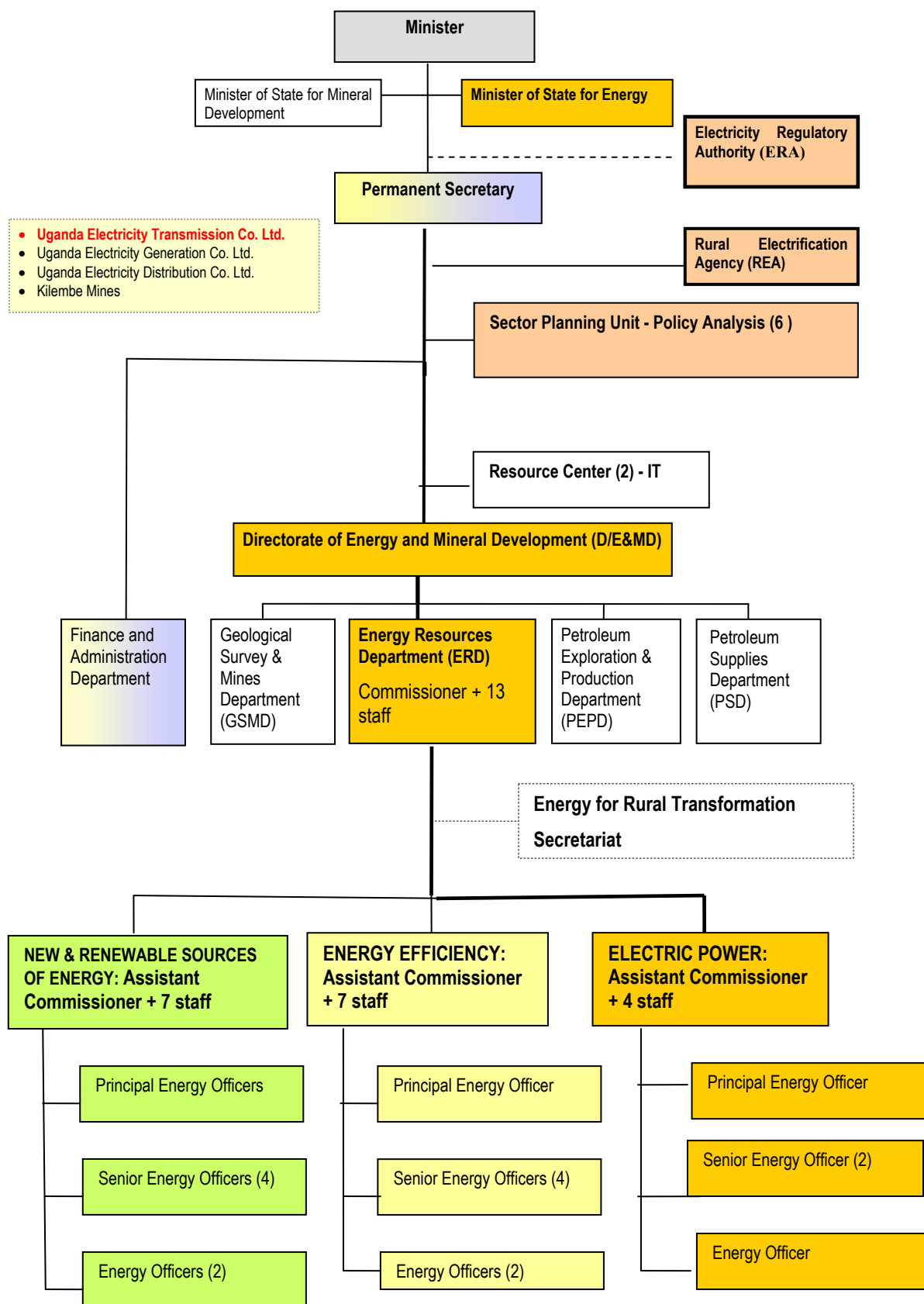
The energy sector comprises four sub-sectors: (i) electricity (power), (ii) petroleum, (iii) new and renewable sources, and (iv) nuclear. The Ministry, however, is divided into four substantive departments: (i) Geological Survey and Mines Department (GSMD), (ii) Energy Resources Department (ERD), (iii) Petroleum Exploration and Production Department (PEPD), and (iv) Petroleum Supplies Department.

Norwegian support is for the first two sub-sectors, and in petroleum, assistance is for upstream (exploration and production) rather than downstream (refining and distribution) activities. In the MEMD's organisation, therefore, focus is on the ERD and PEPD departments. The organisational chart of the Ministry as of 2005 is shown in figure 3.1 on the next page<sup>2</sup>, where emphasis is on showing the various parts of the ERD. A key factor here is that the Electric Power division only has four staff plus the Assistant Commissioner (a post that is currently vacant, and has been so for some time), an issue that will be returned to later.

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<sup>2</sup> Taken from the project document "Strengthening the State Administration of the Energy Sector in Uganda", March 2005.

Figure 3.1: Organisation of the MEMD, 2005



### **3.1.1 Power Sub-sector**

The Power Sector policy goal is “*to meet the energy needs of the Ugandan population for social and economic development in an environmentally sustainable manner*”. The objectives established by the Ministry of the sector are:

- (a.1) To establish the availability, potential and demand of the various energy resources in the country.
- (a.2) To stimulate economic development.
- (a.3) To improve energy governance and administration.
- (a.4) To increase access to modern affordable and reliable energy services as a contribution to poverty eradication.
- (a.5) To manage energy-related environmental impacts.

The public sector instruments in place to implement these policies are: (i) Power Sector Reform Strategic Plan (1999), (ii) Rural Electrification Strategy and Plan (2001 – 2010), (iii) Biomass Energy Strategy and Plan (2002 – 2010); and (iv) Energy Efficiency Strategy and Plan (2002 – 2010).

### **3.1.2 Upstream Petroleum Sub-sector**

The upstream petroleum policy goal is “*to establish the petroleum potential of the country and to promote its exploitation*”. The objectives of the sector are:

- (b.1) To facilitate the acquisition of geological and geophysical data for assessing the petroleum potential of the country.
- (b.2) To promote investment in petroleum exploration and production by packaging and disseminating preliminary exploration data.
- (b.3) To build and maintain an efficient national institution responsible for petroleum exploration and development.
- (b.4) To monitor and regulate the work of oil companies licensed to undertake petroleum exploration and development.

## **3.2 National Development Objectives and the Energy Sector**

Uganda's main development planning instrument is the PEAP, which in turn is linked to the eight Millennium Development Goals (MDGs).

The PEAP consists of five "pillars": (i) Economic Management; (ii) Enhancing Production, Competitiveness and Incomes; (iii) Security, Conflict-resolution and Disaster Management; (iv) Governance; and (v) Human Development.

Table 3.1 below is taken from MEMD's Budget Framework Paper (BFP) for the budget year 2005-06<sup>3</sup>. It shows the relationship between the PEAP and the sub-sector policy objectives listed above. From this table, it can be seen that the Ministry sees its own work in terms of the national objectives of poverty eradication, and thus in line

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<sup>3</sup> Uganda's fiscal year runs from 1 July to 30 June the following year.

with the overarching priorities of the country's development<sup>4</sup>.

The Ministry is part of what has been termed the Economic Services Sector (ESS). In addition to the MEMD, this includes the Ministry of Tourism, Trade and Industry (MTTI). MEMD argues in the BFP that it would make sense to have the MEMD make up a separate Sector Working Group in the context of the PEAP and in terms of its relations to the donors.

**Table 3.1: MEMD Sub-sector Policy Objectives and PEAP Pillars**

<b>PEAP Pillar</b>	<b>Power and Petroleum Sub-Sector Policy Objective</b>
<b>1. Economic Management.</b>	<p>To establish the availability, potential and demand of the various energy resources in the country (a.1)</p> <p>To stimulate economic development (a.2).</p> <p>To increase access to modern affordable and reliable energy services as a contribution to poverty eradication (a.3).</p> <p>To facilitate the acquisition of geological and geophysical data for accessing the petroleum potential of the country (b.1).</p> <p>To promote investment in petroleum exploration and production (b.2).</p> <p>To build and maintain an efficient national institution for petroleum exploration and development (b.3).</p> <p>To monitor and regulate the work of oil companies undertaking petroleum exploration and development (b.4).</p>
<b>2. Enhancing Production, Competitiveness and Incomes.</b>	<p>To increase access to modern affordable and reliable energy services as a contribution to poverty eradication (a.4).</p> <p>To promote investment in petroleum exploration and production by packaging and disseminating preliminary exploration data (b.2).</p>
<b>3. Security, Conflict-resolution and Disaster Management.</b>	<p>To increase access to modern affordable and reliable energy services particularly to areas prone to conflict (a.4).</p>
<b>4. Governance</b>	<p>To increase access to modern affordable and reliable energy services as a contribution to poverty eradication (a.4).</p>
<b>5. Human Development</b>	<p>To improve energy governance and administration (a.3).</p> <p>To increase access to modern affordable and reliable energy services particularly to health centres as a contribution to poverty eradication (a.4).</p> <p>To manage energy-related environmental impacts (a.5).</p> <p>To promote investment in petroleum exploration and investment (b.2).</p> <p>To build and maintain an efficient national institution responsible for petroleum exploration and development (b.3).</p> <p>To monitor and regulate the work of oil companies undertaking petroleum exploration and development (b.4).</p>

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<sup>4</sup> This is a rather formalistic exercise. If one were to have a strict poverty-reduction approach for a power strategy, there would have been more difficult trade-offs between focusing on the poor (who largely are unable to pay for significant quantities of energy), and the larger needs of the public sector, firms and better-off households, who are the actors who in fact use and pay for energy, and thus make energy markets viable.

In the Government's own "National Budget Framework Paper for Financial Years 2005/06 – 2007/08", however, the ESS remains as one sector. The key issues for the coming three-year period set out for the energy sector in that document are four:

- Satisfy the base load (the basic demand for power throughout the day).
- Meet the peak load (the demand for power when it is at its highest, which is during the evening hours).
- Ensuring the stability of the power supply network.
- Financing power projects.

All these are thus related to the power sub-sector.

In the Medium-Term Expenditure Framework (MTEF) at the end of the document, the Government's own resources to MEMD *for development activities* over this period are increased substantially, from UGS 1.84 billion in 2003/04 to UGS 24.3 billion in 2005/06, UGS 38.1 billion the year after and UGS 54.5 billion in 2007/08.

The resources for personnel increased from UGS 1.03 billion in the first year to UGS 1.45 billion the year after and is to remain the same in 2005/06, while in the next two years it is to increase to UGS 1.75 billion – largely evidently in response to the need for enlarging the downstream petroleum department. There is thus no general wage increase or funding for other incentives foreseen for existing staff in the sector.

**Table 3.2: Performance Projections for MEMD, 2005/6 – 2007/8<sup>5</sup>**

	Performance Targets/Indicators	2005/06	2006/07	2007/08
1	<b>Power Sub-sector</b>			
1.1	<i>Increased rural electrification</i>			
1.1.1	Number of connections made during the FY ('000)	40	50	60
1.2	<i>Increased electricity generation capacity</i>			
1.2.1	Total installed generation capacity (MW)	355	375	440
1.3	<i>Improved electricity transmission system</i>			
1.3.1	Additional transmission coverage (km)	120	150	170
1.4	<i>Improved electricity distribution system</i>			
1.4.1	Number of connections made ('000)	25	30	35
1.4.2	Technical and Non-technical Distribution losses (%)	23	20	16
1.4.3	Revenue collected as % of energy billed (%)	90	93	95
1.5	<i>Adaptation of efficient biomass stoves and other Renewable Energy Technologies (RETs)</i>			
1.5.1	Total Annual Per Capita fuel wood consumed (TOE)	0.284	0.292	0.300
1.5.2	Total Annual Per Capita fuel wood consumption if efficient biomass technologies are adopted (TOE).	0.170	0.175	0.180
1.5.3	Total installed electricity from Renewable Sources (MW).	0.72	0.86	1.04
2	<b>Upstream Petroleum (Exploration &amp; Production)</b>			
2.1	No. of line kilometres of seismic data acquired (line km)	200	300	300
2.2	No. of oil wells drilled.	2	3	3
2.3	New number of Exploration Areas licensed.	2	2	2
2.4	No. of staff trained in Petroleum Exploration and Management	15	20	20

<sup>5</sup> From Republic of Uganda (2005), table 5.3, pp. 24-25.

Table 3.2 above shows the projections/performance criteria set in the Government's National Budget Framework Paper for the coming three years. Here specific quantifiable targets have been set for the various areas (only the power and upstream petroleum sub-sectors have been included here).

### **3.3 Power Sector Reforms**

In 1997, the Government formulated a comprehensive and detailed Strategic Plan for transforming the Uganda power sector into a financially viable electricity industry, in order to enable it to supply reasonably priced and reliable power, and to make its full contribution to the further economic and social development of Uganda. The new Strategic Plan 1999 placed particular emphasis on the role of competition in promoting efficiency within the power sector and on private sector participation as being a key driver to enhance the power sector's performance. The reform efforts were also designed to address the need to finance large investment projects in the sector (Uganda Power Sector Restructuring and Privatisation Strategy, 1998). In 1999, the new Electricity Act was enacted, providing for the liberalisation of the power sector, the introduction of new private sector electricity service providers, and the privatisation of existing assets.

As a result of this, the Uganda Electricity Board (UEB) was divided into three separate companies:

- The **Uganda Electricity Generation Company, Ltd (UEGCL)**,
- The **Uganda Electricity Transmission Company, Ltd (UETCL)**, and
- The **Uganda Electricity Distribution Company, Ltd (UEDCL)**.

The UEGCL was concessioned to Eskom, South Africa's power utility, in 2001, while UEDCL was concessioned to a new company, Umeme, in 2004. Umeme is a joint venture between ESKOM and CDC (former Commonwealth Development Corporation).

Ownership, operation and maintenance of the national transmission network will for the foreseeable future continue to be a government responsibility, so UETCL remains an independent company fully owned by the government. UETCL is the single buyer of bulk purchases in the Ugandan power market, and responsible for export sales and for power planning in close co-operation with MEMD.

With the unbundling of UEB, two new government institutions have been established:

- **The Electricity Regulatory Authority (ERA)** was established in 2000 as an independent regulator with the task to licence, set tariffs and monitor generation, transmission, distribution of the electrical energy in Uganda. With financial and technical assistance from Norway, ERA has grown to become a formidable organisation, which is ably filling its mandate.
- **The Rural Electrification Agency (REA)** was established in 2003 to promote social and economic development in the rural areas through planning and provision of subsidies to commercial/private sector based investments in rural electrification schemes. REA is currently receiving support from Sida for institutional capacity building.

In order to support rural electrification, an Energy for Rural Transformation (ERT) program has been established. This is a multi-sector initiative primarily with World

Bank funding, where one goal is to have 10% of rural households connected to power grids by 2012. An important part of the strategy is to encourage local small-scale power generation projects, where any excess power can be sold to the national grid where inter-connection is feasible. The provision of the physical infrastructure for rural electrification will be subsidised to reduce costs for rural users.

An ERT secretariat has been established within the MEMD/ERD, but much of the reporting and management of actual electrification activities and policies is with the REA.

### **3.4 Consequences of Power Sector Reform**

The power sector has thus moved from having two actors – the MEMD/ERD and UEB – around 2002, to having six only three years later: MEMD/ERD, UEGCL, UETCL, UEDCL, ERA and REA. The ERT is almost an actor in its own right since it represents an important fund and has its own management.

The project document for Norwegian support notes that "the reforms (were) designed to create an enabling environment to attract private investment. Gains to the economy are supposed to come from:

- Private capital leading to more investment in additional generation capacity and distribution and meeting growing demands for electricity and increasing area coverage;
- Competition and higher quality of electricity supply (reliability and efficiency ) leading to lower tariffs;
- Improved commercial performance and financial viability in the power sector;
- Take advantage of export opportunities.

*The positive effects* of the Power Sector Reforms so far are, *inter alia*:

- Political interference in the regulation of the sector has been reduced;
- Electricity tariffs have become more (if not wholly) cost reflective;
- Technical and non-technical losses have been reduced;
- the economic performance of the sector has improved;
- Quality of service to those connected is improved.

*Negative effects* include:

- *More expensive power for poor people*: Reforms are introducing tariffs that are more reflective of the cost of the service. This means that tariffs are rising, making it more difficult for poor people to afford to use electricity. As a result of unbundling, the scope for cross-subsidisation has also been eliminated. Disconnections have risen in number as companies strive to raise profits by eliminating poor customers and “illegally” connected customers
- *Little competition*. With a small system like in Uganda, no true competition can be introduced by splitting generation into several firms, and the net gains to be expected from restructuring the power sector may be small or even nonexistent.

The need to undertake extensive restructuring may be much less evident than in large systems<sup>6</sup>. On short term the reform has thus not led to the intended result.

- *Little private capital has been mobilized.* The private capital market in Uganda is small, and is only relevant for smaller projects. Private investment therefore means mainly foreign private investment. While foreign private capital has been attracted into operation of existing generation and distribution, it has so far not been attracted by new generation projects where it is most needed. The private sector is attracted by assured profitable returns on investments. This entails large demand, a prerequisite unmet in Uganda (and by most developing countries), since electrification levels are low and per capita consumption of those connected limited by poverty and low industrial activity. Successful private sector involvement appears to need government subsidy support, at least in the short to medium term" (op. cit., pp. 6-7)

The *structural* consequences may be as important:

- Functions that clearly belonged in one entity may now be spread across several, such as planning. This has created uncertainty in terms of responsibilities/division of labour, who is to ensure that information is provided to the right persons and institutions, etc.
- The splitting of responsibilities means scarce skills now also must be divided across several entities. The need for skills upgrading may therefore have increased, since similar functions may now be carried out several places.
- There is probably also some duplication of work that now must be done. Financial analysis of investment proposals may have to be undertaken by the proposing organization, such as UETCL for transmission lines. UETCL now is expected to go to the market with investment projects, so these must be bankable business propositions. At the same time, MEMD and the ERA may also need to be able to independently verify UETCL's calculations, since these may form an important basis for setting future tariffs (ERA), or verifying future contingent liabilities (MEMD, since UETCL remains a publicly held company).
- With new actors, roles and the need for "arm's length" dealings amongst them, there may be a number of inter-organizational tasks that are new and for which none of the predecessor organizations really have any experience. These new tasks need to be carried out properly, and will require skills training.

### **3.5 Sub-sector Functional Analysis**

Neither the Ministry nor the new institutions have fully adjusted to the new situation. This creates two kinds of "grey area" inefficiencies: (i) *overlaps*, that may lead to competition and conflicts over roles, or (ii) *gaps*, where it is not clear who really is in charge and where tasks therefore "fall between the cracks" and do not get the required attention. These situations may be aggravated because of manpower misalignment: staffing no longer is optimal compared to the task load the different entities are to assume. Under-utilized staff or skills try to carve out or defend tasks that really no longer are theirs, and over-stretched staff have to leave some tasks aside.

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<sup>6</sup> The impact of power sector reform in Uganda should be documented in greater detail, especially the effect on private investment and the poor

The recent study on improved alignment and harmonization of donor support in the energy sector through a Sector Wide Approach (SWAP), talks of "policy voids" that have emerged. This in part emerges because there is now a need to develop policies in areas where previously this simply was not required (see Holtedahl et. al, 2005).

At the same time, the Ministry of Finance, Planning and Economic Development (MFPED), has imposed a "hard budget constraint" on all sectors: the resource envelope available for recurrent and investment costs includes all external funding, whether donor grants or concessional lending. The incentives are thus to make best use of resources available, rather than try to increase donor funding, since any increase in external funding will lead to an equivalent cut in own budget resources.

This ceiling on public sector funding means that the need for private investments has increased. But the interest and resources of the private sector for getting engaged in the energy sector have seemingly been over-estimated. The public sector instruments required to assure private investors an acceptable return against the risks they are running entails considerable commitment and perseverance, which is another task-set that the Ministry and the unbundled new institutions have to adjust to<sup>7</sup>.

The regional dimension is also becoming more important. The development of the East Africa Energy Master Plan is to address power trade, exchange information and experiences, ensure joint promotion of petroleum exploration, and other activities. This is hence a further set of new responsibilities for the energy-related institutions.

The net result is that there are a considerable number of uncertainties in terms of both clarifying roles, and priorities within the different institutions. A number of steps have of course been taken to address these issues, including things like the Management Diagnostic Study for the UETCL. What is missing, is a larger sector-wide assessment that can help sort out the "grey areas", ensure that "policy voids" are being addressed by the appropriate institution, that activities that necessarily will have to involve several institutions, like planning, or activities that in fact are being duplicated by several institutions independently of each other, like some of the financial analyses of projects, are done in as rational a manner as possible.

The typical instrument used for such overview assessments is a Functional Analysis. This uses a participatory approach to mapping the key actors, their core functions, and their relationships, as a means at arriving at consensus agreements on what kinds of improvements may be necessary to structures, instruments, processes and procedures. Key areas are information flows, decision making roles, mobilization and management of financial resources.

In Norway, the body that has traditionally carried out such studies is Statskonsult, "Public Management Norway", a state-owned corporatised consulting branch of government. Statskonsult has done a number of such studies in other countries, and one lesson is that political ownership and management is an absolute pre-requisite for such a process to succeed. In the case of Uganda, the proposal would be to focus on

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<sup>7</sup> One of the key challenges is to assess what are reasonable incentives for encouraging private sector engagement. The distribution of risks, and the contingent liabilities that the public sector assumes when offering investment enticements, has been a bone of contention in connection with the country's largest power project, at Bujagali. A number of analysts believe that Uganda is neither going for the least-cost power site, nor has negotiated a favourable deal. Part of the problem is the difficulties inherent in agreeing on what are "fair" and "reasonable" parameters for closing such an investment deal in a poor country in a region with major conflicts and uncertainties.

the power sub-sector, not the entire energy sector. Furthermore, it should involve all the six entities referred to earlier: UEDCL, UEGCL, UETCL, ERA, REA and the power-relevant sections of the MEMD.

### **3.6 Findings, Conclusions and Recommendations**

The main *Findings* and *Conclusions* are the following:

- The energy sector is receiving more attention as Uganda's energy problems are becoming more acute and its energy potential more commercially interesting.
- The power sector has undergone rapid and profound legal and structural changes over the last several years. Generation, distribution and transmission have been unbundled, with the first two concessioned to private operators. A regulator and a rural power agency have been created.
- The petroleum sector has experienced organic growth in its capacities within the existing structures, as focus has been on exploration. Now that Uganda may have found commercially exploitable resources, this sector is also set to undergo changes to adjust to this new situation.
- The further changes to the external environment – regional collaboration and energy markets, possibilities for new actors entering with significant energy potential (southern Sudan), makes a modern energy administration more important than ever.
- MEMD has formally structured its own objectives and activity plans to be in line with the PEAP. MFPED's "hard" budget constraint further provides incentives to focus on overall efficiency and effectiveness of sector activities.
- The rapid changes in the external environment and internal restructurings of the power sub-sector have led to considerable transition costs, and existing unclarities regarding divisions of labour, roles and tasks. These need to be addressed before the sub-sector can fully assume its developmental, management and economic responsibilities.
- Norwegian support to the sector is therefore in line with national priorities:
  - The support to sector coordination (SWAP) is highly appropriate;
  - The power sub-sector requires considerable assistance to improve its overall structure and functioning;
  - The petroleum sub-sector also needs support to continue preparing for possible gas and petroleum exploitation.

The *Recommendations* are:

1. Norway should suggest to the national authorities that a functional analysis be carried out of the energy sub-sector, and Norway should be willing to finance such an undertaking.
2. Norway could suggest that Statskonsult be invited to lead such an exercise.

## **4 Support to UETCL**

The Uganda Electricity Transmission Company (UETCL) is not only the monopoly transmission utility, but for the time being also acts as the single buyer in the power sub-sector. The company therefore has an important role to play in the overall planning of the sector, since the total least-cost solution to a given power supply option needs to take into account not only the generation costs, but also transmission infrastructure costs, and the rates at which the single-buyer is going to purchase the power and still be able to turn a profit when on-selling to power users and power distributors. This task is not made easier by the fact that the main actor on both sides of the transmission line is southern Africa's dominant integrated power utility, Eskom.

UETCL needs to be able to go to the markets with viable proposals for the transmission investments while arguing its case before the regulator regarding prices. It must negotiate purchase deals with independent power producers (IPPs) that are being encouraged not only by the larger power projects, but also rural stand-alone projects. If and when non-hydro power generation sources become realistic – gas-based power from own production in western Uganda or from southern Sudan, for example – UETCL will be expected to shoulder the responsibilities for getting the transmission lines in place in time for the country to take advantage of these.

At the same time, UETCL took over a transmission business area that is seen as inefficient both technically and economically. UETCL therefore has a major task in improving its management and technical performance.

In order to address in particular these latter tasks, Norway is going to fund a twinning between Norway's transmission company Statnett, and UETCL. A draft Project Document (PD) from October 2004 forms the basis for the collaboration. The long time period between the preparation of this third version of the PD and the appraisal is due to the Management Diagnostic Study of UETCL that MFPED's Utility Reform unit commissioned about one year ago. A key output of this Study was to be a Corporate Business Plan (CBP) for UETCL. The Statnett collaboration would have to be adjusted to those findings and recommendations from the study that Uganda wished to implement.

The study was carried out by Norplan, with the draft submitted in October 2004. The study has largely been accepted by both the UETCL and the Ministry. UETCL has recently finalized the CBP and its activity plan for the coming period.

### **4.1 Twinning of Statnett and UETCL**

The project proposal is the result of a dialogue between UETCL and Statnett during 2004. The issues identified are therefore those where UETCL has said it would like Statnett support.

The process of preparing the Diagnostic Study has, however, made UETCL aware of the need to focus more on the business aspects of its activities. And this points to some differences in the business environment that UETCL has to operate in, compared with Statnett.

The first is its role as single buyer, which is politically and commercially highly sensitive and complex. According to some UETCL staff, they spend more time worrying about the single buyer role than they do on the technical transmission issues.

The other is the very dynamic business environment in Uganda. The power sector is characterised by high uncertainty, great demands for getting more power to industry and other large-scale consumers, questions regarding to what extent major projects like Bujagali will move ahead and what the business conditions will be for the various actors (what price UETCL will have to pay as single buyer and what leeway if any it will have in negotiating the price), how the regional power market will develop, etc.

Norway was the first country to deregulate its power market, so Statnett has considerable experience in this transition process. But the Norwegian and Nordic power markets remain well structured, transparent, competitive and stable. The business environment for Statnett has thus remained quite stable. The transition from a traditional engineering-led utility to a market-driven transmission company has not been dramatic.

UETCL is facing a different situation. It is clear that UETCL management is now focusing more on the business side of its operations than it did before the Diagnostic Study. The work of putting together the CBP seems to be changing the corporate culture further, where management is having to focus hard on its commercial role.

The PD has identified four areas that should be addressed: (i) strategy and business development; (ii) transmission system utilization, (iii) corporate efficiency and budgets, and (iv) management information. The challenge is for Statnett to ensure that it is a clear business model that underlies notions such as "management information". The document provides a diagram that shows how Management Information sits at the apex of the various systems, for example, and thus has the task of integrating the information flows so that management can take good decisions. But the overall "feel" of the document remains one of a technical design rather than a "focus on the bottom line"-approach to business development. The key challenge, in the view of this Appraisal, is for Statnett and UETCL to ensure that their twinning project is driven by the CBP and its concern with market viability.

One small detail in the document is that Statnett is to forward CVs of external consultants being proposed, so that UETCL can decide which one to use. This is important because it makes UETCL responsible for the choices made, it develops their skills at consultant selection (which is often a new but critical task for corporations such as UETCL, which necessarily has to hire in many specific skills), and it makes the partnership between the two twinning bodies more equal in practice. Too often the external partner takes decisions regarding critical inputs such as key consultants, thus pushing the partnership towards a more supply-driven rather than demand-driven dynamic. UETCL and Statnett should be commended for clarifying this and other such relational roles well in the document.

## **4.2 Logical Structure of Project**

The overall structure of the project as laid out in the document is clear in terms of the general tasks that are to be carried out. It is also obvious that the parties have carefully assessed UETCL's responsibilities and identified the main areas where Statnett is expected to be of assistance.

But the implicit LogFrame presented in the text, and the more formal table that is given at the end of the document, should be cleared up so as to make management and monitoring easier.

Since Norway has agreed to use the international glossary of planning and evaluation terms developed by the Development Assistance Committee (DAC), it is suggested that this is also done in this document for simplicity's sake. In the DAC glossary, "long-term objective" is termed Goal, "short-term objective" is Purpose, and the lower-level elements in a planning matrix are simply the Outputs and the Inputs. Once more detailed planning is done, the Activities are specified as the transformation of Inputs into Outputs. In some LogFrame matrices Activities are therefore included between these two elements.

The Goal formulation in the document is that "UETCL shall within the framework of laws, guidelines and regulations be capable of operating more efficiently in the reformed and privatised sector in Uganda and thus make it the most efficient Transmission System Operator in the region".

There is no formulation of a Purpose in the document. Under the section entitled "Short-term objectives", there is simply a description of how the four areas of activities relate to one another, but without any specific objectives provided.

#### **4.2.1 Project Goal**

Scanteam would suggest that the Goal for this project be the one for the power sector: "to meet the energy needs of the Ugandan population for social and economic development in an environmentally sustainable manner". The reason is that a Goal normally is the larger objective to which the specific organisation is to contribute. In this case it is UETCL as a company in the power sector that should guide the strategic thinking of the utility, so that its business decisions are directed towards contributing towards what the other actors in the sector also are to be working towards.

#### **4.2.2 Project Purpose**

What is now called a Goal would in fact be an appropriate Purpose for UETCL – where UETCL wants to be at the end of the project period, if all Outputs are produced and the assumptions/external factors are fulfilled.

The *formulation* of the Purpose should be improved, however. First of all, describing the frameworks within which UETCL is to work is not required for objectives formulations – it is assumed that a firm follows the country's laws, etc. Secondly, the statement that UETCL should "be capable of operating more efficiently" is a very weak one, since any improvement, no matter how minute and irrelevant, would mean UETCL had reached its Purpose. Third, even if UETCL *does* operate more efficiently, this does not mean that it may become the region's most efficient operator. Finally, even if it does become the most efficient operator, this may not be much of a target if the other operators remain inefficient.

Since UETCL is a government owned utility, it remains for the authorities to define its performance targets. So far, as pointed out in the Diagnostic Study, they are largely qualitative, whereas more modern utilities – including Statnett – get more specific targets from their governments. One such indicator is often some measure of return on assets, though the parties should consider to what extent this is a realistic measure in today's market in Uganda. But the one specific target that is given in the Budget Framework Paper is for extension of the national transmission system (see table 3.2). It is thus important that UETCL is able to identify, finance and implement necessary investments for system expansion and improvements, probably against some financial

targets. While this may not be included directly in the Purpose formulation, this needs to be included in the indicator set used to track performance.

One possible Purpose formulation could be along the lines of: "By the end of the project period, UETCL shall be an efficient transmission system operator as measured against system operations, system expansions, and overall return on assets". The indicators selected should therefore address these three dimensions of UETCL's operations, and the targets UETCL should reach by the end of the project period should be against international "good practice" benchmarks, adjusted for the actual situation in Uganda. These indicators and targets would typically be included/negotiated in some kind of performance contract that the UETCL would have with the national authorities<sup>8</sup>.

#### **4.2.3 Project Outputs**

What are termed Goals in the four activity areas (sections 3.2.1-3.2.4) are in fact the Outputs to be produced. The subsequent section 3.2.5, labelled Outputs and Activities, provides a well-structured overview of these, though the formulation of the Outputs should be in terms of the state of achievement at the end of the project period<sup>9</sup>.

The lists of activities that are given are presumably those that are necessary and sufficient to ensure that the Outputs are produced. Normally that would not be necessary in a Project Document, so the fact that the activities have already been discussed and agreed to between the parties is a great step forward. The Activities furthermore have a dateline attached to them (by when the activities should be done, or if the activities represent an annual activity, etc).

A number of the activities may have to be changed in light of the changes that the CBP may lead to as far as UETCL's overall activity plan is concerned. But since an activity plan is already there as the basis for the discussions, this should be easy to adjust. The critical factor that needs to be borne in mind is the manpower available to implement the various tasks. The detailed planning exercise therefore needs to take into account not only what is critical in terms of what needs to be produced first, but also who is going to be responsible for implementing and therefore if that person really will be available to carry out the foreseen tasks.

#### **4.2.4 Organisational Capacity Analysis**

A key factor in all project planning, is the assessment of the organisation's existing capacity to implement all the activities foreseen. The classic mistake is to over-estimate – often times badly – the ability to implement and manage all the activities.

The UETCL PD does not include any such organizational capacity assessment. But in this case this is due to the fact that the Management Diagnostic Study carried out during the fall of 2004 contains exactly such an analysis of the organisation. While the study was not ready by the time the PD was prepared, it was known that the study was underway. Furthermore, the PD has identified a number of the key UETCL

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<sup>8</sup> This would be an explicit one in cases where a formal contract exists, or an implicit one when MEMD simply sets targets for UETCL performance but there are no specific consequences – for example for management or management benefits – linked to target achievements.

<sup>9</sup> 3.2.1.1 "Efficient strategic planning process within UETCL" would become "UETCL has a complete and efficient strategic planning process in place", etc.

persons who will be responsible for various components of the project. What remains to be done is to verify if the assumptions underlying this allocation of tasks and responsibilities remain valid now that the CBP is being designed and therefore the allocation of in particular senior management time may have been re-prioritised.

#### **4.2.5 Risk Analysis**

There is no formal risk analysis in the document, but the right-hand column in the LogFrame table (pp. 21-23) contains a listing of the key assumptions underlying the production of the various Outputs.

The assumptions linked to what was termed the Long-term Objective and which is suggested re-formulated to constitute Purpose, are important. The first one states "powerful actors in the region want to see an efficient, credible and independent UETCL carry out its functions", while the second is "Stakeholders who can gain a lot from distortions in UETCL practices are not able to interfere". These two statements are in some sense the mirror images of each other, pointing to the two sets of stakeholders who can influence the business environment of UETCL in a positive or negative direction. A risk analysis could have been based on a stakeholder analysis of key actors, assessing their interests in UETCL and the resources they can call upon to influence UETCL. A Risk Mitigation Plan should look at how the supporters of UETCL can be encouraged to enhance its performance, but also how UETCL can contain the influence from those who may try to have UETCL favour them. Such a risk analysis and mitigation strategy can not be part of a document that is in the public domain, but it should be part of the strategic actions management pursues<sup>10</sup>.

The remainder of the LogFrame table lists some important assumptions for the Outputs to be produced. Some of the factors are internal – whether management will pay sufficient attention, enough staff time will be available, etc – while others address external factors, such as having other actors interested in the assessment of external threats and opportunities. What is missing is any sense of the importance of these factors, what management can or should do about them, and if there are some assumptions that are more critical than others, so that management really needs to come up with a plan to address them.

A number of these issues are undoubtedly being addressed in the CBP, but the parties should be comfortable that they have in fact identified the key risk factors, and have plans in place to address at least the most important ones.

#### **4.2.6 Indicators and Means of Verification**

When it comes to specifying indicators and the means of verifying them (sources of data), the LogFrame is implicitly quite acceptable. Some Outputs are straight forward and thus do not require indicators. But quite a few address issues like capacity development, and these are often difficult to measure. The LogFrame makes reference to sections 3.2.5.x, where the Outputs and Activities are listed. Generally what is given there, are the key activities that are to take place, and the dates by which they

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<sup>10</sup> Coming out and publicly accusing certain actors of being interested in distortionary practices is of course not possible nor tactically smart. What is important, however, is to be aware of these issues, and have a clear pro-active plan to either reduce the probability of negative influences being exerted, and if that is not possible to influence to any major extent, have plans for mitigating the possible negative consequences of their actions.

are to be completed. What is not said explicitly, is how the activities are to be recorded and made available to management.

Since all of these activities are standard internal tasks of a corporation like the UETCL, presumably there are also standard reporting procedures in place that make it clear who is responsible for producing the reports, in what format, to whom. There is no need to make the PD more complicated than necessary, but a sentence that notes that the issues of the reporting (means of verification) are seen to be satisfactory to management and based on modern principles regarding content focus, deviation analysis and action oriented proposals, would make the LogFrame more credible.

The CBP provides a good overview of the current situation of the UETCL, and there is thus a satisfactory Baseline in place for monitoring progress for a number of key activities. It is therefore probably not worth carrying out a formal study just for the sake of generating the additional data needed for a full-range baseline.

#### **4.2.7 The Budget**

An overall three-year budget has been prepared, with a more detailed one for the first year of collaboration. This first-year budget has allocated work-days from Statnett across the individual activities spelled out in sections 3.2.5.x, and it is thus quite transparent in terms of what the costs of each input from Statnett will be. This will permit better management and control by UETCL, for example assessing if the costs of a particular activity is justified in light of what the CBP says should be key areas during the coming twelve months.

The budget also notes in very general terms what the UETCL inputs will be. As is often the case, actual budget figures on the national contributions are much vaguer and not well specified. This poses a problem as it means UETCL has not prepared an activity-based budget for its own operations, and thus has not committed its own human resources and other assets to the various activities – it is presumably assumed that this will happen as activities move along.

This is being addressed in the project in that one of the activities specified under Output "revise the company strategic plan" (section 3.2.5.4) has as its fourth activity, "Based on the strategic plan and CBP clarify the framework for the budget process within the UETCL ... with annual upgrading". This should probably be made clearer and stronger, with the expectation that within the first year, a system for activity-based budgeting is in place, and that as of the second year of the project, there will be complete budgets for both parties' contributions to the activities.

#### **4.3 Framework Conditions**

The overall planning framework for the UETCL is falling into place. The Diagnostic Study has helped the corporation get its business focus, and the twinning project with Statnett will help strengthen the internal planning.

The relationships to the MEMD, UEGCL and UEDCL, future IPPs, to REA and ERA are in principle in place. In reality there are a number of "fuzzy areas" regarding responsibilities etc, that led to the proposal in chapter 3 that the power sector should carry out a functional analysis. This may uncover issues that UETCL needs to address to enhance its own efficiency and effectiveness further.

Norway is funding a study looking into the coordination issues in the sector, and in particular the possibilities for a more formal Sector-Wide Approach (SWAP). This

study is hence timely, in part because it addresses some of the issues that a functional analysis should look into. But the study is addressing the more general coordination problems that the sector is facing.

The problem of corruption is quite serious in Uganda. The likely problem that UETCL will face, as noted in the LogFrame, is actors wishing to influence UETCL's decisions in the role as single buyer and monopoly manager of the transmission network. Apart from classic corruption practices – selling favourable solutions against particular pricing or distribution decisions – the more serious threat is probably the use of political power to influence UETCL. The corporation is aware of this, and the sector as a whole has taken steps to ensure the independence and "arms-length" dealings within the sector. Since the set-up is fairly recent, it may be too early to see how well this works, but is an issue that could be included in the Mid-Term Review.

The challenge of HIV/Aids and how this may impact a knowledge-intensive firm like UETCL is not addressed in the project. Uganda is facing a dramatic situation in this field, and is considered one of the countries that has done the most and come the farthest in addressing the pandemic. But the project may wish to consider how it should contribute further to this. This includes possible resources for HIV/Aids activities in UETCL, including monitoring the HIV situation among employees, the kinds of support and services the corporation can provide its employees who may be or become HIV-positive. But it may also have an impact on training approach and costs, as HIV-sensitive environments often train more staff than is strictly necessary, in order to have "redundancy capacity" in place in light of the probability that a share of those trained may have to leave or will die from Aids. Since most of the project training is taking place in Uganda, this may not impact costs directly, but may entail having more staff participate in the various training activities. The additional cost is thus one that will have to be borne by UETCL in the form of setting aside more senior staff time for training.

#### **4.4 Findings, Conclusions and Recommendations**

The main *Findings* and *Conclusions* are the following:

- The UETCL is facing a rapidly changing external business environment, where its role as single buyer is the most challenging. The recently concluded Management Diagnostic Study is the basis for designing the Corporate Business Plan (CBP), which is setting the strategic objectives for the corporation. The Statnett support needs to be embedded within the CBP.
- The *Goal* for the project should be the objective for the power sector set by the Government in its National Budget and Framework Paper. The *Purpose* should be more specific in terms of where UETCL should be at the end of the period, where dimensions covered could include operations management, systems expansion, and return on assets, along the lines of a performance contract between the authorities and UETCL management might include.
- *Outputs* and *Activities* are well specified and quite detailed, though they may have to be adjusted to be in line with the CBP.
- There is no *organizational capacity* analysis in the document, but this is covered in the Diagnostic Study. What is required is to verify that capacity and UETCL priorities remain such that project implementation can move ahead as foreseen.

- *Risk factors* are listed, but no analysis done and no risk mitigation strategy laid out. Since some factors are critical to the satisfactory performance of UETCL, management should put in place such a plan (if one does not already exist), though for obvious reasons this can not be put in the public domain as part of a project document.
- *Indicators* and *Means of Verification* are satisfactory as activities with timelines are presented. Baseline information for many key variables are found in the Diagnostic Study. What should be made clearer, is if reporting will in fact cover all the issues, and if reporting will be decision-making oriented rather than simply focus on activities and identification of problems.
- *The Budget* on Statnett inputs is by activity, permitting good management. The UETCL budget is not included, and should be as of next year.
- *Framework conditions* regarding own planning and donor coordination are being addressed; corruption remains a key problem that should be tracked; HIV/Aids needs to be addressed better.
- With these adjustments, the project design is by and large good, so changes are largely editorial and minor.

The **Recommendations** are:

3. Since the CBP is to be ready during June, it is seen as important that Statnett come to Kampala as soon as UETCL management can accommodate this. The main task should be to update the PD in line with the CBP: enrich the document with more information on how activities will be monitored and reported; greater clarity on UETCL inputs; better risk analysis and risk mitigation plan; and thus a more comprehensive and consistent LogFrame.
4. Statnett should ensure that its mission includes senior business management, to ensure that the Statnett inputs will be in accordance with the final CBP.
5. The project should begin implementation as soon as possible, as UETCL is under pressure to improve performance fast. The revised PD should therefore be processed as quickly as possible, to avoid unnecessary delays.

## **5 Support to the Petroleum Department**

The Petroleum Exploration and Production Department (PEPD) is a well functioning regulatory body for petroleum promotion, licensing and exploration. PEPD operates as a department under the Ministry of Energy and Mineral Development (MEMD). The current licenses are held under modern Production Sharing Agreements (PSA).

PEPD has enjoyed co-operation with Norway on a variety of issues including exploration and licensing strategy, fiscal modelling, promotion, negotiations, activity monitoring, commercialisation of discoveries and revenue management. One recent workshop in PEPD was on the organisation of the state petroleum administration. Norwegian support has been channelled through Petrad since 1995, where Norad has approved funds for seminars and short term consultancies that addressed priority requirements of PEPD.

With a possible commercial discovery, the Uganda Government moves to a new level of regulatory responsibilities and policy challenges. This situation warrants a more comprehensive support to develop the necessary national institutions and the vital functions of government.

PEPD's mandate is to promote and monitor oil exploration. The expected departmental outputs include:

- Initiate oil exploration and development policies;
- Undertake field surveys and use the acquired data to promote the country's petroleum potential;
- Monitor the work undertaken by the licensed oil companies;
- Build nation capacity in petroleum exploration and development.

PEPD has an approved staffing of 61. The majority of the senior professionals have an academic background in geology or geophysics. Since inception, PEPD has carried out massive training in petroleum exploration related subjects. This is highly specialized training that can only be done overseas. There is also a need to carry out phased training in line with evolution of petroleum exploration programme. Previously the focus was on oil exploration. With the development of the sector, there is now greater need for skills required during the development phase including drilling and acquisition of more sophisticated laboratory techniques.

PEPD is headed by a Commissioner, and consists of two units: the Geology division which is responsible for mapping, cartography, petroleum engineering and laboratories, and the Geophysics division which is responsible for gravity and magnetics, seismics and surveying. Each of these is headed by an Assistant Commissioner.

### **5.1 Proposed Support to PEPD**

The Project Document (PD) for Norway's proposed support to PEPD covers five areas: (i) policy, legal and regulatory strengthening, (ii) capacity building, (iii) technical and economic studies, (iv) petroleum programme management, and (v) upgrading of computer systems. The PD in fact refers to the support to be for a Programme consisting of four projects, according to the four first areas above (the upgrading of computer systems is not considered a project in itself).

This raises issues regarding how to structure a possible LogFrame. It is clear that the support is conceived of as a project for a definable entity, namely PEPD. Turning this into a more complex Programme concept is not seen helpful. In the discussion below, therefore, the support is discussed in terms of one project with four components.

#### **5.1.1 Policy, Legal and Regulatory Framework Strengthening**

The objective of this component is to produce a policy and regulatory framework that ensures optimal creation of value from the petroleum resources in Uganda, and to identify the appropriate institutional setting for key functions of government. This is to be done through activities in eight different areas:

- Oil and Gas Policy
- Legislation
- Petroleum Regulations
- Model PSA
- Organising the State Petroleum Admin.
- Health Safety and Environment
- Revenue Management
- Training and Advisory Services, New Institutions

#### **5.1.2 Capacity Building for PEPD**

The objective is to strengthen PEPD to efficiently carry out its roles and functions in petroleum planning and administration, and this is broken down into seven areas:

- Assessment of Institutional Capacity and Training Needs
- Data Management
- Resource Assessment
- Promotion and Review of Exploration and Licensing Policy
- Activity Monitoring
- General Training
- Laboratory and Facilities

#### **5.1.3 Technical and Economic Studies**

Given the remote location of possible discoveries and the poorly developed infrastructure and markets in the region, the Government is likely to be required to take an active role in the commercialisation of oil and gas in Uganda.

The objective of the technical and economic studies is to study the key parameters that will decide whether or not a discovery may be commercially developed and establish an understanding of the roles required by the Government to make it happen. This is expected to cover primarily three areas:

- Gas utilisation in Uganda
- Infrastructure Requirements
- Regional Oil and Gas Market

#### **5.1.4 Petroleum Programme Management and Computer Updating.**

The programme management shall ensure that the support to PEPD is carried out in an efficient manner, according to approved work plans and budgets, and that the results achieved are properly reported to the involved institutions and the sponsors. The component is divided into two – external management (administration and management costs incurred by the Norwegian partner), and local administration support, to fund the additional burdens to PEPD from the project.

There is also funding set aside for upgrading the current computer facilities, which are inadequate given the new demands that are being put on PEPD. This, however, is simply a procurement operation and not a separate component with a specific objective.

### **5.2 Structure of Project**

The Norwegian support to PEPD is conceived of as part of a larger support to MEMD, where the other part is the support to the Energy Resources Department, ERD. The argument behind this structure is that both parts are to be implemented within MEMD. There are also a couple of areas of mutual concern in the two parts, namely that (i) gas may become a source for power generation, and (ii) both departments will manage sectors where the private sector is to play a key role. The public sector therefore needs the capacity to perform economic and financial evaluation of projects, which requires similar technical skills in both sub-sectors.

This is a rather tenuous argument, however, since the actual structure and concerns in the power and petroleum sub-sectors are in fact quite different, and there are very few spill-over aspects of one sub-sector to the other in terms of most other issues.

A more logical structure would in fact have been to have had one project for the petroleum sub-sector, and another for the power sub-sector. Support to UETCL and ERD would then have been provided together, which as will be argued in the next chapter would have made sense from a number of perspectives.

#### **5.2.1 Project Goal and Purpose**

The PD does not provide a Goal statement for the overall support to PEPD. This is because of the concept that the support is for a Programme with four separate projects. It therefore has formulations for objectives (Goals?) for each of the four components instead, as cited above.

Given that the Programme-with-four-projects structure is not appropriate, and in line with the argument given concerning the UETCL project, the Goal should be in line with the one for the upstream petroleum sector as such, "To establish the petroleum potential of the country and to promote its exploitation for social and economic development".

The Purpose of the project would be a statement describing to what level of capacity the PEPD should be at the end of the project period if all the Outputs have been produced and the assumptions underlying the project have in fact been fulfilled. This capacity should logically be tied to the four "objectives" described earlier for the upstream petroleum sub-sector (see the four sub-points b.1-b.4 under section 3.1.2). When looking at the project itself against these four sector objectives, however, it seems clear that the first two are not being directly addressed by the current project (those objectives have largely been attained due to the support already provided).

One possible formulation could therefore be “The PEPD is an efficient national institution responsible for petroleum exploration and development that is capable, in a sustainable manner, of monitoring and regulating the work of oil companies licensed to undertake petroleum exploration and development”.

The problem with this is that it may be too limiting. The first component of the project, which is looking at the institutional and regulatory framework for petroleum sector management, goes well beyond the PEPD as such. While PEPD will be instrumental in developing and promoting the framework, the framework affects all actors in the sector, including PEPD itself. The Purpose formulation is, however, adequate for the remaining components of the project.

An acceptable Purpose statement could be "Strengthening PEPD and establishing a modern institutional and regulatory framework, capable of promoting, monitoring and regulating, in a sustainable manner, work of oil companies licensed to undertake petroleum exploration and development, and management of petroleum revenues".

### **5.2.2 Project Outputs and Activities**

As is seen from the description of the project components above, there is a very long list of activities to be undertaken. For each of the eight areas under the first component, the document lists a set of what it terms are Outputs and Norwegian-funded Inputs. In the Oil and Gas Policy area, for example, the PD lists under Output that the project should support the process of defining policies with regards to (i) national equity participation (revisited), (ii) exploration and licensing (revisited), (iii) health, safety and environment (HSE) (revisited), (iv) development and depletion, (vi) gas utilisation, and (vii) other possible legislative updates. Each of these legislative updates could be considered a separate Output. The Inputs proposed are, however, only for three separate workshops – on petroleum policy, HSE, and gas policy.

The wording with respect to what is actually to be achieved is somewhat ambiguous, however. In the case of the Oil and Gas Policy, the document states that the project "should support the process of defining policies with regards to..", and then come the six fields. This leaves the reader uncertain as to whether the parties have in fact agreed that the project is to ensure that Uganda gets a modern policy in place regarding national equity participation, HSE, and the other fields. If – as seems to be the case – this is in fact what is intended, then this should be stated clearly as Outputs to be produced: "A national policy on national equity participation produced, enacted and enforced", or similar. Given the timeline, where this field is to be addressed early on in the project period, the ambition may therefore very well be that not only is legislation studied, drafts produced, discussed and finalized, but Parliament has passed it and regulations have been developed that permit PEPD or any other entity so authorized, to actually carry it out. With the current formulations, it becomes very unclear what is to be produced. And without that, it becomes impossible to assess whether the inputs provided are sufficient and the best ones, or not.

This kind of ambiguity can be found several places in the document, and mars what appears otherwise as a well-thought through list of activities to be carried out to produce the Outputs necessary for Uganda to have a modern gas and petroleum framework and monitoring system in place.

Furthermore, the project is clearly rather complex and highly ambitious. There are in total about 20 areas of activities under the four components, each one having potentially several Outputs. There is, however, a fair amount of duplication in the

overall structure. In the above case from the Oil and Gas Policy area, one sub-area is HSE, which is to be addressed through a workshop. However, there is a separate HSE area within the same component (bullet point six under section 5.1.1). Similarly, point (v) on development and depletion given just above is presumably closely linked with activities to take place under the area of Resource Assessment (bullet point three under section 5.1.2). In both the first and second components, there is Training provided, which presumably can be managed as one integrated activity set.

There is a tentative timeline for the various activities (one timeline for each of the areas – bullet points – given in each component). The distribution of activities across the three year period foreseen for the project seems reasonable. There is some bunching of activities early on, but this is largely due to up-front consultancy inputs required for the framework improvements. This is a set of tasks that is considered fairly urgent, and where much of the technical inputs in any case will be external.

But the timelines are given for the overall area. As noted above, in each area there are often a number of Outputs that are to be produced. This means that there is no specified timeline for each Output. This is presumably to be defined more carefully in each annual work plan. But the gut reaction is that the timelines are overly ambitious and are so general that they conceal rather than reveal how the various Outputs are going to be managed.

A LogFrame matrix with each Output clearly specified would undoubtedly produce a fairly long table that would show the magnitude of the implementation and management tasks. It is therefore recommended that such a LogFrame is provided, not least of all to simplify where possible, to clarify what kinds of staff resources will be required to implement, and to ensure that task responsibilities are clear.

### **5.2.3 Organisational Capacity Analysis**

There is no organisational capacity analysis provided. From conversations with the consultant who produced the PEPD PD, the Department's capacity is considered good. Management is viewed as among the best, if not the best, in the region, with both strong technical and managerial knowledge and experience. The senior staff have been in the Department for a long time, with very little loss of skills over time. The capacity that has been created through the training that has taken place during the years with Petrad support is therefore still largely in place.

PEPD believes, however, that if gas in fact is found, then a more active private sector will aggressively seek to recruit among the very scarce skills that exist in Uganda. The PEPD will therefore become quite vulnerable to such poaching of skills, something that worries management a lot. For the time being, no real solution to this future danger is seen, since there are currently no options available to the Department for additional wages or incentives that may make the public sector competitive.

The possibility of future skills loss is a serious threat to the PEPD and the project as such. One way of addressing this is of course through redundancy training – providing skills to more staff than necessary. But this requires that there are in fact additional staff to be trained, which currently is not the case: the staff levels approved are against specified posts in the public service, so there is no “excess staff” sitting around to be trained for anything else but their own tasks.

#### **5.2.4 Risk Analysis**

In part due to the lack of the formal LogFrame matrix, there is also no structured risk analysis provided in the document. The various challenges that the project is facing, given the long list of Outputs that are expected to be produced, are therefore neither identified, nor is there then an action plan to address the most important ones.

One key risk is of course the ability to attract and retain qualified staff. A careful assessment of the sustainability of capacity developed in the case that gas is found and key staff may be attracted away is therefore important, because the long-term Impact of the project clearly hinges on the PEPD and possible new public sector institutions being able to carry out their monitoring and quality assurance tasks.

A more serious threat to the overall ability of the sector to manage future gas and petroleum income, is the issue of corruption. While there is a “front loading” of activities, which may create problems for realism in project implementation, the one area that this Appraisal would suggest be brought forward, is Revenue Management. This is currently considered for the last year of the project. The various taxes, tariffs and other forms of income from natural resources exploitation is largely "unearned income" or economic rent, and thus typically the source of major competition regarding its management and utilization. This is a highly political issue, and one where it is always more difficult to get consensus once funds have begun flowing and possibly corruptive practices have already begun. If Norway is going to be able to contribute to better control, enhanced accountability and transparency in the management of petroleum and gas income, deciding on revenue management structures and procedures is an urgent task.

Gas and petroleum finds may lead to large and rather sudden revenue increases, which from a macro-economic perspective may become destabilizing for the economy. One thing is that it may have a significant impact on the foreign exchange situation – either through massive savings on the petroleum import bill, and/or through large export earnings. This may create distortions in the foreign exchange market with a revaluation of the national currency ("Dutch disease"), which Uganda had difficulties handling last time it happened, with the rapid appreciation of the coffee prices in the early 1990'ies. But oil revenue may also have an impact on the budget, and even on the overall national economy, shifting relative prices between sectors and levels of economic activity between regions. Being able to manage these kinds of sudden shocks to the economy – even if these are pleasant ones of sudden wealth – will require considerable skills and insight. Taking these possible future scenarios on board as potential results from the activities in the sector is therefore important. While the revenue management area mentions some of these concerns, this is a major task that should be tackled up-front and with the necessary resources.

The preparation of a more complete LogFrame will help identify these risks, and others. This is required for discussing which risk factors seem the most important, and thus what should be done to either reduce the probability of them occurring, or reduce the potential consequences. This in turn is necessary for the sector to improve the probability of success and attainment of its objectives in a sector that can be very contentious and difficult to manage.

#### **5.2.5 Indicators and Means of Verification**

Since there is no LogFrame, and sometimes vague or missing Output definitions, there are also no systematic set of Indicators, or Means of Verification.

Many of the (implicit) Outputs are quite easy to specify, and thus there is no requirement for indicators: new laws or regulations are unambiguous products (as long as we do not get over-ambitious and try also to specify the quality or scope of the legislation). With the timeline provided – as long as it is de-composed by specific Output and not just for the general area – the targets in terms of dates are also easy to put in place.

What still needs to be defined is the reporting system that PEPD intends to use (may already have in place?) to ensure that progress in the production of the various Outputs is tracked. Management should have timely reporting on achievements, shortcomings and probable causes for under-performance, so that it can make decisions and take action where necessary if Outputs-production goes off-track.

### **5.2.6 The Budget**

The budget and sub-budgets (by project component) are quite systematic in tracking the inputs that are to be used for each of the areas in each component. In the Oil and Gas Policy area, the three workshops are costed separately<sup>11</sup>. The overall budget structure is therefore clear and consistent. What is unclear, as noted earlier, is if (i) these workshops are necessary and sufficient for attaining the proposed Outputs, and (ii) if the costing of the actual inputs is realistic. The training in Revenue Management, for example, is probably vastly under-estimated, if the task is to be addressed as it should.

The reason for this statement is that Revenue Management is not so much an internal sector issue as a major cross-sector challenge. Following what has been stated above regarding the importance of this problem to the long-run management of the sector and its resources, Norway should seriously consider a much wider perspective on the actors that need to be involved, and the kinds of skills that the various institutions will require in order to play their requisite role for a modern and transparent management to be feasible. Institutions that need to be included and that need specialist training for the specific tasks they must fulfil within the overall system, would include the MFPEd, the Bank of Uganda, the Auditor-General's office, the relevant Parliamentary oversight committees. Due to the danger of within-public-sector mismanagement, Uganda and its donor partners should also look at models for involving the private sector and civil society organizations in more systematic and structured forms of policy debate, monitoring, reporting and access to the relevant data. These are areas where the respective Norwegian counterpart institutions need to be invited in to train and perhaps quality assure the performance. One particular issue that Norway may consider is to bring in senior Norwegian politicians for the overall workshop or debate, to engage their Ugandan counter-parts in the political and longer-term ramifications of oil revenue. It is important that the politicians from both sides be fully involved, and in particular that Norway is able to provide credible and knowledgeable senior politicians for such an event. Peer learning is important, and politicians in all countries listen much more carefully to their counterparts from other countries rather than to technical experts. While engineers and economists have difficulties accepting or understanding this, it is an important "lesson learned" from other settings, and should be respected in order to assure success.

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<sup>11</sup> The typical inputs cost is either USD 8,000 or USD 15,000, presumably as a function of the average expected costs of one work-week of senior technical expertise.

As tends to be the case, the budgets only cover the Norwegian inputs. Total cost of producing the various Outputs is thus not presented. But it is clear from PEPD management that they are committed to producing the Outputs. There are reasonably clear ideas of who is going to be responsible for the various activities<sup>12</sup>.

Almost all the funding is for consultancy inputs or training. The exceptions are that Norway is going to provide funding for some necessary equipment for the laboratory, as a complement to the training being provided by a small Danish-funded UNDP training project. There is furthermore USD 54,000 for the upgrading of computer hardware. The project has furthermore a 10% contingency fund. Given that the total budget is for nearly USD 1.8 million, this is a fairly substantial USD 175,000 in reserve. This fund can be used towards the more complete Revenue Management activity set, however, so may be quite useful.

The administrative and management costs are quite high, constituting 13% of the budget at USD 230,000. Of this, about 60% is for external management (Statnett) while the remainder is for local administration. This includes administration and accounting, committees, etc.

### **5.2.7 Collaborating Partner**

There has been some discussion whether Petrad or the Norwegian Petroleum Department (NPD) would be the better collaborating partner on this project.

PEPD management expressed a preference for Petrad as their main collaborator. There were two main reasons given. The first one is that they have been working with Petrad for ten years, and therefore know Petrad and feel that Petrad knows them and understands their needs.

The other is that since Petrad is a small independent organisation, it will not try to push its own consultants or staff, but is free to shop around for the best expertise available. PEPD's experience has been that this has provided excellent skills that are targeted at the needs they have.

NPD's strength is that in addition to the technical expertise, it also has the public sector management and organisational experience. This is important, because PEPD needs also to learn how to function efficiently and effectively within an even more complex political and administrative reality.

The preferred model may therefore be a contract with Petrad as the main partner and with NPD as a formal sub-contractor, where NPD's roles may be specified. This would be in particular where the public sector management experience is relevant, which would provide an important value-added to the overall consultancy contract.

## **5.3 Framework Conditions**

The framework conditions for the sector are rapidly changing. The project therefore represents good pro-active planning for the eventuality that Uganda may find gas and perhaps also petroleum. The nature of the public sector's management roles will in that case change fairly dramatically, and it is important that the State is planning

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<sup>12</sup> When the Appraisal team asked for the names of the managers for the various activities, these were clear in some cases, and not in others. But PEPD made the claim that this project represents the Department's key activities, and that finding the right persons therefore is not an issue.

ahead and will be prepared. Trying to catch up with a rapidly changing industry is never a good strategy, and particularly not in the field of hydro-carbons.

Unlike the power sector, the petroleum sector structurally remains compact and unified, and whatever skills exist are still concentrated in PEPD. This is likely to change once gas is found, with the establishment of some new bodies. But the sub-sector should look carefully at the experiences in the power sector, and see if there are ways of avoiding excessive fragmentation of organizations, skills, and responsibilities, while at the same time ensuring accountability and transparency. Because the main challenge the sector will face is most likely to be corruption. Unless revenue management is addressed thoroughly and well, the training and other activities Norway is funding will probably yield little in terms of larger public benefits. This issue thus needs to remain at the top of both parties' agendas.

Norway is by far the larger donor, and is supplementing the Danish/UNDP assistance, so there is no donor coordination problem.

The petroleum sector also needs to address the HIV/Aids crisis. This will become a much greater issue if and when gas is found in the more remote western parts of Uganda. The kind of large-scale investments, demand for lots of male man-power and good pay means that commercial sex is likely to flourish, with the downside consequences in terms of sexually-transmitted diseases and HIV.

#### **5.4 Findings, Conclusions and Recommendations**

The main *Findings* and *Conclusions* are the following:

- The PEPD is a competent and reasonably well staffed Department. With gas finds, it needs to acquire skills in petroleum exploitation and management. Uganda itself requires a modern legislative and institutional framework. This project will address three key areas: (i) policy, legal and regulatory strengthening, (ii) capacity building, and (iii) technical and economic studies.
- The Project Document does not contain a formal LogFrame. It has a confusing structure based on the notion that it is a Programme with four projects, which is neither helpful nor appropriate. There is no formulation of a *Goal*, though this should be the objective for the petroleum sector set by the Government. There is also no *Purpose* provided, but a proposal has been suggested here.
- There is a large number of areas and *Outputs* proposed, reflecting an ambitious project. Many of the *Outputs* are poorly specified, however, and it is often difficult to see if the proposed *Activities*, *Inputs* and *Budget* are realistic. There is also some duplication and hence scope for simplification. While there is some "front loading" of activities, Revenue Management should be given priority and take place earlier.
- There is no *organizational capacity* analysis in the document, but the PEPD is considered to have the managerial and technical skills to implement the proposed activity programme. What is lacking is an assessment of *sustainability* in light of probable loss of staff once the private sector grows due to commercially viable gas finds.
- *Risk factors* are not provided, but are critical to the viability of the project. Revenue management and concerns with corruption and macro-economic

management are key concerns that require willingness to address this issue on a much broader front. A risk management plan ought to be prepared.

- *Indicators and Means of Verification* are missing, though in many cases better specified Outputs mean these are easy to identify. This should include decomposed timelines by Output. A key factor is the specification of the reporting system, to ensure that management gets actionable and timely data.
- *The Budget* for the Norwegian inputs is by area, hence quite transparent, though it is unclear if the sub-budgets are sufficient. Revenue management is seen to require a much broader approach, involving more institutions on both sides, and hence more resources.
- The sector needs to include HIV/Aids issues, especially if petroleum exploitation begins, while donor coordination is simple: Norway is the main donor.
- Despite the rather harsh comments on the formal preparations of the document, the project itself is critically important as addresses key concerns of the national authorities and potentially for the entire country's economy, has the full ownership of the local partner, is a relatively urgent one, and should move ahead as soon as the various project elements have been addressed.

The **Recommendations** are:

6. A complete LogFrame needs to be elaborated, to specify Goal, Purpose, Outputs, targets (deadlines), Risk Factors, Means of Verification, and – where needed - Indicators.
7. With the LogFrame, possible Output simplification should be carried out, and the Budget revised. In the case of Revenue Management, the budget may have to be revised upwards substantially.
8. Risk analysis is very important. A risk management plan should be produced.
9. Petrad should be the main collaborating partner, with NPD as a key sub-contractor.
10. The task of upgrading the Project Document should be carried out immediately, since the project is urgent, priority, and in principle has identified well the key areas, activities and expected results.

## **6 Support to the Energy Resources Department**

The Energy Resources Department (ERD) is headed by a Commissioner and consists of three divisions: (i) Energy Efficiency, (ii) New and Renewable Sources of Energy, and (iii) Electric Power. Each is headed by an Assistant Commissioner. The establishment for the department, according to the Project Document (PD), is a total of 40 staff, with 13 in the Commissioner's office, 7 in Energy Efficiency, 7 in New and Renewable Sources, and 4 in Electric Power (see Figure 3.1<sup>13</sup>). ERD is charged with providing services to the energy industry, promotion and regulation of the sector. It also ensures efficient utilization of energy in all the sectors of the economy. Its mandate is:

- To ensure sufficient, reliable and low cost electricity supply in the country;
- To ensure efficient utilization of energy in all sectors of the economy;
- To ensure efficient and reliable supply and usage of petroleum as a energy resource;
- To explore and develop new and renewable sources of energy for usage in all sectors of the economy.

While the ERD has a number of well trained staff, it is increasingly difficult to retain these because of better opportunities offered by the private sector. There are furthermore no institutions in the country to train people in this sector. More advanced training therefore must be done abroad.

### **6.1 Norwegian Support to ERD**

In parallel to the support to the PEPD, Norway is to provide support to the ERD in somewhat similar fashion: help develop key policy areas and strengthen the capacity of the ERD in the field of skills and organizational systems.

The project is structured as the one to PEPD, as if it were a programme consisting of three projects. As with the PEPD support, this is in fact a classic project with three components: support to power sector planning, support to developing the financing of the power sector, and strengthening of the ERD's capacity.

#### **6.1.1 Power Sector Planning**

Within the power sector planning, the document gives the following two objectives for this component: "To assist in adjusting power sector plans to increased robustness, flexibility and variable financing capacity", and "To follow up possible recommendations from the SWAP Fact Finding Mission as to MEMD capacity building for design, appraisal, financial management, implementation and monitoring of programme components". The component is foreseen to have five different sub-components, which are laid out in the document:

- Follow-up activities to the SWAP study's recommendations;

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<sup>13</sup> In addition to these numbers come the Commissioner and the three Assistant Commissioners, but that still only sums up to a total of 35 staff. It is not clear where the other five staff members are, or if the correct number is in fact 35. There is in addition a secretariat for the Energy for Rural Transformation, ERT, that is also within the ERD.

- Power Sector Strategy Plan;
- Regional Power Co-operation;
- Large scale biomass power plants (or co-generation ["cogen"] plants);
- Performance Monitoring Manual.

The SWAP mission had not taken place when this PD was prepared. It was hence not possible to foresee what kinds of recommendations the report would contain, nor what the complete content of the SWAP study would be. The PD is therefore necessarily vague about what this first output would consist of. The document in fact notes that a number of the issues discussed as outputs under this component may be addressed by the SWAP study.

Many of the concerns that are included in the Power Sector Strategy Plan should perhaps be included in the suggested Functional Review. The reason is that a number of the concerns clearly will entail collaboration with some of the other power sector entities. It is also clear that the ERD, and more particularly the Electric Power unit, does not have the own staff to carry out even a fraction of all the tasks that the PD lists under this sub-component. So it may well be that the sector requires some re-thinking of its structure and staffing before some of these areas can be addressed.

### **6.1.2 Financing of Power Sector**

The objective of this component is given as "This project aims at *analysing means of increasing both public and private funding* to the electricity sector, especially into generation of electric power" (italics provided in the original). The three sub-components included here are:

- Public financing assessment
- Private investment review
- Public Private Partnerships (PPP)

The need for mobilizing additional financing for the sector's further development is clearly a prime concern, and this component is putting together a comprehensive view of the various options open to the authorities in order to address the country's severe power shortages.

### **6.1.3 MEMD Capacity Building Programme**

The objective for this component is "building the necessary skills and capacity in ... MEMD to efficiently plan and implement plans regarding energy policies, strategies and priorities, and mobilisation of capital". The five sub-components are:

- Assessment of institutional capacity, staffing and training needs;
- Standard contracts (PPA, IA etc.) and financial analysis;
- Manual and training program in contracting of consultants;
- Ad-hoc assistance/framework contract;
- Training program.

The first sub-component in fact talks about doing an assessment for the power sector, but the actual description makes it clear that it is only addressing the needs of MEMD,

and presumably only the ERD within the Ministry. But such a sector-wide assessment makes sense, and should be a key dimension in any possible Functional Analysis.

## **6.2 Logical Structure of Project**

The PD for this project is less well specified than the other two projects. It is clear that project preparations have come up against the lack of capacity as a serious constraint to the planning in all areas. But apart from this substantive problem, the structure of the PD itself could be improved. Section 2.1 is almost word for word repeated in sub-sections 3.x (though amplified), so could simply be deleted. While the description of the sector and its challenges in general is quite good, the description of what the project itself is going to engage in, is very often too short.

Section 2 contains an overview of the management structure of the project, which is clear. What is unclear is why there should be a separate manager for each of the three components of the project. While they logically are distinct activities, there is no argument why one person should be responsible for power sector planning while another one looks at the financing of the power sector. Since no names are attached to these positions, it is not clear that there are specific individuals with particular skills that are thought of for the tasks, which might justify this division. But in general this is a project with a very limited number of local staff that can be engaged, so it would be good to reduce structural overhead and bureaucratic management to a minimum.

There is also no clear discussion on where the project in fact is to be located. The project talks about the ERD in general, but most of the tasks are in fact primarily the responsibility of the Electric Power (EP) division. One thing is therefore if the project is going to be housed in the ERD Commissioner's office – which has the largest staff – or is in fact lower down in the system, in the EP division.

The lack of clarity here is important. If the project wishes to actually impact on policy, provide skills for policy making etc., it needs to be as "high" up in the organisational system as possible. At the same time, it needs to respect the division of labour and responsibilities that exist, and thus clarify whose skills and tasks are going to be addressed.

Roles between local staff and external consultants are not clearly spelled out. But one of the consequences of the lack of own capacity in the ERD is that a number of the outputs are expected to be produced by external consultants. This, however, we know – and is recognised by the consultant who prepared the PD as well – that this means that the use-value of the studies and reports is going to be limited, while the learning from carrying out the studies will be negligible as far as local staff are concerned. This is a major short-coming that needs to be discussed. While the lack of staff and at the same time the urgent need to get some of the suggested policies and studies in place is obvious, there needs to be some realistic perspective on how this is going to be addressed during the project period.

MEMD has tried to address this through its Budget Framework Paper, among other things. The budget constraint and the tough line taken by the authorities on not expanding public sector staff means that the MEMD is facing some very tough choices. But it needs to make those choices if it wishes to deliver on its responsibilities. The PD discusses in general terms having a more flexible organisation, so that the project could call upon and contribute to the resources not only of the EP division but staff in the other divisions as well. But this cannot be some suggestion in a PD – this either is an explicit policy or at least there is a clear

agreement that the issue is going to be addressed and that within a time limit some approach or solution is going to be found.

The Functional Analysis would provide useful input for this. It could look at whether staff should be re-assigned, or a more flexible and open structure within ERD is possible, or junior staff can be contracted in with an agreement that EP or ERD can expand its staff in for example two years' time, or other possible collaborative mechanisms can be put in place for bringing in staff from other power sector institutions, from the University of Makerere, or elsewhere. The project hopes that it will be possible to hire in up to five junior staff who over time can join the ERD, and this is a very helpful step. But it is not clear if this has been cleared politically, or if this remains a proposal from the consultant. But the point is that the PD cannot just let this issue hang, since the capacity building component becomes nearly meaningless unless the staff shortage situation has some believable solution within a given time frame.

### **6.2.1 Project Goal and Purpose**

The PD has neither an explicit Goal or Purpose for the project. Regarding the Goal, that should logically be the same as for the UETCL project, namely the for the power sector in general: "to meet the energy needs of the Ugandan population for social and economic development in an environmentally sustainable manner".

The Purpose is more problematic. The reason is that while one can put together a reasonable statement for the UETCL, this becomes more problematic for the ERD. The lack of own capacity means that it is difficult to say with any reasonable certainty what the expected state of ERD is supposed to be three years from now, if the project goes ahead as foreseen. A key concern with a Purpose formulation is that management sees this as both a realistic target and something that it is willing and expects to be measured against. This is therefore an issue that needs to be taken up with ERD, to find out what they believe is a reasonable yet ambitious target in light of the kind of support they can expect from the project, the changes/increases in framework conditions that the government hopefully will put in place, and the other support the ERD is receiving (the PD has a list of the other donors and their activities in the sector).

The objectives provided for each of the three components are not quite consistent (the one for capacity building overlaps in part with the previous two), there are formulations that are in terms of process rather than end-of-state descriptions, but they can constitute a useful basis for developing a unified Purpose for the project since they point to what is intended overall in the three component areas.

### **6.2.2 Project Outputs and Activities**

For most of the sub-components, the expected Outputs have been defined, largely in terms of studies or reports to be carried out. While the main thrust of the studies is described, the actual focus and more detailed terms of reference will obviously have to be elaborated once the project gets underway. Most of these studies are rather complex and will require external assistance. The PD notes, as referred to earlier, that the ERD involvement will largely remain at the management level of the tasks, and learning from participating in seminars etc. As was discussed before, this heavy reliance on external consultants is quite problematic and needs to be addressed better.

It is the capacity building component that raises the most serious questions, however. The project assumes that there will be a capacity building assessment at the beginning of the project period, when the nature and scope of training and presumably other forms of capacity building will be defined. But this means that a number of Outputs remain frustratingly vague. In describing the Regional Power Co-operation sub-component, for example, the document notes the need for studying power trading and export/import options in order to prepare for large-scale hydropower schemes or possible gas-fired power plants. It then goes on to note that "Competence in planning and negotiation of these aspects is important to optimise Uganda's interests and contributions to the Nile Initiative". But it is difficult to ascertain whether this specific training is returned to later, as under the capacity building this is touched upon in very general terms but without a clear decision whether this is so important that it will be included in the project, and whether the ERD has the staff necessary to train in this field: number of staff, with pre-qualifications, and time to undertake the training and then apply the skills later on.

It may be unfair to expect this level of detail in a PD where the project preparation resources were limited. But as it stands now, there is really no way that a meaningful LogFrame can be constructed, because the uncertainties are so great. This indicates that this project really is not ready to go yet, and that more work may need to be done, for example in the form of a start-up phase where a number of issues can be hammered out.

There is a time-chart that shows the when the various Outputs are to be produced. While this is helpful in a general sense, it does not help clarify what exactly is to be done, except when it comes to external consultants carrying out studies. This is hardly satisfying. As with the other projects, there is also lack of specificity regarding who is going to be involved, so it is not clear if the timelines are realistic regarding staff involvement in the various activities.

### **6.2.3 Organisational Capacity Analysis**

The PD looks at the organisational structure and current staffing levels, noting the disparities between tasks/responsibilities, and the actual staffing levels. One of the key issues is that with the restructuring, many of the practical planning and other activities that had been entrusted to the former UEB now will at least in part have to revert to the EP division. Yet this division has not seen its staff size increase.

As was discussed above (last paragraph, section 6.2), there a number of short-term and medium-term approaches that can be taken to address this short-coming. But all of them require some decisions and effort by ERD management to become viable. And depending on which solution or combination of approaches are decided upon, they will have quite different consequences regarding how the capacity building activities should be structured. The idea of moving towards a more "open" and flexible organisation, for example, will require considerable work with management, since its tasks will be very different from what can be characterised as traditional hierarchical "control and command" role to being more supportive and enabling for technical staff who are to carry out tasks. These approaches, which are common in Scandinavia, require considerable work both among management but also staff since they now have to take on clear responsibilities and will be held accountable for their tasks – a situation which many experience as uncomfortable and threatening as their necks are so much more clearly on the block. This may in fact be more challenging in a traditional male-dominated engineering milieu than it would have been in more

people-centred ministries like health or education. So decisions on what solution to take are not simple and straight-forward, but will require considerable discussion and awareness raising regarding what is really involved.

This task would typically be one that a preparatory phase of the project could devote time to, so that the various actors fully comprehend and feel comfortable with the solution set that is finally arrived at. And this, of course, would be within the context of the longer-term capacity development strategy that MEMD in general but ERD in particular would have to adopt.

#### **6.2.4 Risk Analysis**

There is no risk analysis in the PD, though a couple of the key threats are mentioned: the lack of own capacity, and the difficulties of attracting and retaining qualified staff since they are offered better opportunities in the private sector.

But there are a number of risks and difficulties involved in a number of the studies as well. The controversy surrounding the Bujagali power project points to the considerable economic and political interests that are involved in the sector. Developing key studies on the power sector strategy need to be thought through in terms of how the process is going to be handled, both because there needs to be broad consultation, but also to ensure full insight and transparency in how conclusions were arrived at. There needs to be a lot more discussed regarding how those given these various tasks can be allowed to deliver their best professional opinion without being unduly influenced by particularistic interests.

The risk analysis is perhaps more important in this project than is often the case exactly because the own capacity is so weak. That means that the ability to ensure that the work is done at the highest professional standards, that management will be able to really be on top of the various processes and the results emanating from them requires serious attention. Relying on external resource centres, either in-country or in the region or even from abroad may be a solution, such as establishing a Quality Assurance Group that will in fact track key consultancy tasks and report to ERD management at key points in the process. While this will increase the costs of the project somewhat, the future costs of not doing tasks well can be extremely high. The risk analysis should therefore look into this and other possible ways of addressing uncertainty and quality in a more systematic way.

#### **6.2.5 Indicators and Means of Verification**

Given that there is no LogFrame, nothing is really being said along these dimensions. As far as the reports are concerned, the actual delivery of the reports is of course a good indicator. What is needed, however, is some way of ensuring that the reports in fact address all the questions they were supposed to, and have delivered analyses and recommendations that are at the level of quality that is expected and necessary. There is therefore a need to work a little bit on this.

Regarding the capacity building activities, these need to be specified in terms of expected impact on the work that is to be done by the ERD. This is a difficult task, but a classic one for capacity development activities that needs to be included.

#### **6.2.6 The Budget**

The budget is limited to the Norwegian inputs. As with the PEPD project, there is an overall budget (done both in NOK and USD) for the entire project, and then more

detailed budget tables for each of the three components, where they are broken down by sub-component (not necessarily by Output) and by year. At the level of seeing how the proposed budget resources are going to be used, it is thus clear, and seems to be consistent with the activity timeline.

What is not clear at all, however, is what the funds are going to be used for, and how the various annual sums have been arrived at. Most of the funding here, as in the other projects, is for external technical assistance. But only the UETCL project provides unit costs and work-days of inputs that enable the reader to understand how in fact the resources will be allocated. The budgets therefore reflect the uncertainty and lack of concrete information that permeates the task ahead in ERD.

Regarding capacity building activities, this covered either as workshops in connection with particular Outputs, or through a general training component at the end. Concerning the latter, however, once one looks at what is actually being funded, there is nothing there for actual training tasks, except some additional funding for the external consultants regarding possible additional work load they may have in connection with training. The larger component there is the foreseen funding for junior staff hired by the project for possible hiring into the ERD at a future date.

On the face of it, this does not constitute a very satisfactory approach to training and skills upgrading. A series of workshops may be helpful for training purposes, but is a limited instrument (though the category may cover other activities as well). The amount of time that external experts will be devoting to various kinds of skills upgrading – workshops, mentoring, technical training – is not discussed anywhere, so it is not possible to see this. But a general experience is that technical experts hired to carry out tasks, such as analysis of the power sector, often are not good trainers: they have neither the pedagogical skills nor often an interest in carrying out training activities – that is not their field.

The Capacity Assessment should therefore also include a Capacity Building Strategy, which is more than putting together a series of workshops and assuming that foreign experts are going to transfer some of their skills and knowledge. There needs to be a much more detailed plan identifying how the various strategic skills needs are going to be addressed – including the training abroad that the PD points to. Costs of the various activities, the priorities and linkages to the various Outputs, ensuring that skills upgrading is taking place in time for the new skills to be utilized etc, are important elements in such a plan.

This probably means that more resources should be allocated to capacity building activities. Whether this needs to be in addition to what is already in the overall budget, or if it will be sufficient to re-allocate is not clear. But there seems to be very little flexibility in the budget, and no un-allocated funds, so this may require additional financing.

### **6.2.7 Collaborating Partner**

Nothing is explicitly said about which Norwegian institution is considered to be the best collaborating partner. The only specific reference is to the fact that the Norwegian Energy and Water Directorate (NVE) has developed a standard course on the contracting of consultants (section 3.4.1 in the PD). But there seems to have been an implicit idea that NVE should be the main collaborating partner.

This issue is something that ought to be discussed somewhat more. NVE has the merit of being a close counterpart institution in the Norwegian context, though the parties may also wish to consider alternatives such as energy-focused consulting milieus.

It should be noted that the Appraisal mission unfortunately never had the opportunity to meet with senior management in the ERD or EP, and does not have the opinion of the ERD in these matters.

### **6.3 Framework Conditions**

The key framework condition that needs to be borne in mind is that Norway's support be coordinated with and in line with the assistance being provided by other donors. As noted in the PD, there are a dozen donors or UN agencies engaged in the sector, though to quite varying degrees.

The largest funding source is the World Bank, through its Power III and Power IV programmes, support to the ERT, and the implicit guarantees and available financing from the International Finance Corporation for the Bujagali power project. The World Bank task manager has in her comments to the PD noted that some of the activities suggested for Norwegian support either overlap with or may be quite similar to activities already carried out or planned for in Bank-funded activities. This needs to be corrected for.

But the project should also discuss more carefully what the GTZ energy adviser is engaged in, since he sits as an adviser to the ERD directly. He is presumably focusing largely in the fields where Germany is providing other forms of assistance, which is new and renewable resources, and energy conservation. But there are a number of capacity building activities included in the German project, and it would be important that this be harmonized with what Norway intends to do. The particular constraint that needs to be considered is the lack of local staff, and therefore that the programming of activities and training is coordinated across ERD.

Sweden's assistance to the REA may also complement and provide additional capacity building activities that the ERD can benefit from, and which the Norwegian-funded project can build on.

The SWAP study points to the advantages of Uganda moving towards a more coherent programme approach in the energy field, exactly to ensure greater alignment of the various donor funded activities, harmonisation between donors in terms of activities and implementation modalities, and thus enhanced efficiency and effectiveness of donor resources. Now that this document is ready in draft form, Norway needs to engage the MEMD in a broader policy dialogue in terms of what kinds of "vision" the Ministry has for donor support in the future.

Finally this project needs to include a more explicit plan to address HIV/Aids.

### **6.4 Findings, Conclusions and Recommendations**

The main *Findings* and *Conclusions* are the following:

- The ERD has few staff, especially in the Electric Power (EP) division which will be central to Norwegian support. The project is to support (i) power sector planning, (ii) power sector financing, and (iii) ERD capacity building, but it is unclear about where it will be placed – in the ERD as such, or the EP. Because of limited own staff, the PD assumes that much of the work will have to be

done by external consultants, which is troubling from a capacity building perspective. The consequences and alternative measures are not discussed.

- The PD does not contain a LogFrame matrix, has very limited description of what it will in fact do and achieve, has no *Goal* or *Purpose*, and the *Outputs* are fairly general in nature. There are no *Indicators* or *Means of Verification*, though some targets are implicit through the timeline provided. There is a fairly limited *Budget* that provides expected funding per output, but without specifying much the inputs foreseen. This vagueness is in part due to the difficulties of designing a meaningful project under the current uncertainty in the sector, but more could have been done, and in general this project does not yet seem ready for implementation.
- There is no *Risk Analysis*, but this is seen as critical given the considerable economic and political interests involved in the sector. One possibility is to establish a Quality Assurance Group to assist the ERD steer the contents of the work through ensuring maximum transparency and consultation in the work.
- MEMD needs to decide how it intends to address the need for greater donor coordination, perhaps in line with international "good practice" proposals in the recently concluded SWAP study. MEMD should also consider the Functional Analysis as a further contribution to clarifying the sector's and in particular ERD's future structure, size and focus, and thus required capacities.
- One way of bringing these different strands together is that (i) the Functional Analysis takes place during the fall of 2005, (ii) the Terms of Reference for the analysis has as its point of departure the idea that the sector intends to move towards SWAP-like arrangements, though the timeline does not have to be fixed, (iii) the support to ERD begins this fall as a preparatory project, with the intention of having the final project document ready by the end of the year. The PD would then be in line with the recommendations of the Functional Analysis and the SWAP-orientation.
- The preparatory project would provide support for the Functional Analysis, do the capacity assessment and develop a capacity building strategy and action plan, define more carefully the studies to be undertaken etc. In essence the preparatory project would help the ERD and in particular the EP to get their "business plans" for the next several years in place, in line with better aid coordination, restructured sector etc.

The **Recommendations** are:

11. The project should start off as a Preparatory Project during the fall of 2005, with the intention of developing a full-scale PD for implementation as of early 2006. During this preparatory phase a Functional Analysis of the power sub-sector is carried out and the MEMD also takes decisions regarding how it wishes to enhance donor coordination in the sector. The project would support both these processes.
12. When developing the revised PD, attention should be paid to producing a good risk management plan, perhaps including establishing a Quality Assurance Group; defining the Capacity Building Strategy and Action Plan; developing a more detailed budget; and specifying the role of external consultants so that maximum management responsibility remains with the ERD on their use.

## **Annex A: Terms of Reference**

### **1. BACKGROUND**

Norway is considering support to the following two projects:

- a) Twinning Uganda Electricity Company Ltd (UETCL) – Statnett SF
- b) Capacity building in the Ministry of Energy and Minerals Development (MEMD)

The goal of the Twinning UETCL-Statnett Project is to contribute to macroeconomic growth and private sector development by cost reductions in and efficient utilisation of the national electricity grid, and by facilitation of investments in both electricity supply and productive activities that requires access to electricity.

The objective of the project is for UETCL to become an efficient Transmission System Operator based on technical, organisational and strategic criteria. UETCL and Statnett have for this objective defined the following four areas of co-operation:

1. Strategy and business development
2. Corporate efficiency and budgets
3. Transmission System Utilization
4. Management Information

The development of a steering/information system for the top management of UETCL (area 4) will be key to co-ordinate capacity building activities carried out under the project.

The MEMD Capacity Building Project aims at strengthening the ministry's administrative capacity for both the electricity and the hydrocarbon sub-sector. The main objective of the programme is to ensure that the power sector and possible hydrocarbon resources are administrated in a way that contributes to sustainable development of the national economy and welfare of the people in Uganda.

The programme is specifically aimed at strengthening national administration of the electricity and the upstream hydrocarbon sub-sectors by strengthening the Energy Resources Department and the Petroleum, Exploration and Production Department of MEMD.

In view of the challenges described above, the programme will have particular emphasis on active government intervention to secure private investment in the power sector and commercialisation of natural gas, and efficient implementation of Uganda's energy policies inter alia through more efficient co-operation with development partners.

For both these projects reference is further made to the Project Documents dated 01/10/2004 (UETCL) and March 2005 (MEMD), and Mandate for Dialogue documents dated 08.10.04 and 19.01.05.

### **2. PURPOSE**

The purpose of the appraisal is to provide input to the assessment of the proposed projects as well as concrete recommendations on the design of the projects.

### **3. SCOPE OF WORK**

In light of priorities and strategies of the GoU, the consultant shall assess the relevance, design and sustainability of the proposed project. The appraisal report format in NORAD's Programme and Project Cycle Manual and Handbook for Institutional Development shall be used as a checklist for identifying the most important aspects to be assessed. Particular regard shall be given to the absorptive capacity in UETCL and MEMD, and an assessment of the appropriateness of the Norwegian cooperating institutions (Statnett (UETCL) and Petrad/OD/NVE (MEMD), respectively).

With regard to providing concrete recommendations on the design of the projects, particular consideration shall be given to the following issues:

- LFA Matrix: Relevance of the formulated goals, objectives and outputs towards GoU priorities, and the proposed means of verifying achievement of these.
- Appropriateness of the project administration mechanisms, including reporting requirements.
- The need to manage identified risks.

### **4. MODE OF WORK AND REPORTING**

In addition to information contained in the Project Documents and relevant Policy and Strategy Documents, the consultant is expected to consult with relevant Ugandan institutions and stakeholders, as well as other donors (Annex I).

The Consultant shall provide debrief of and discuss the preliminary findings of the appraisal mission findings with MEMD, UETCL and The Norwegian Embassy in Kampala before leaving Uganda.

A joint or separate Report for the two projects report shall be in written in English and not exceed 20 pages for each project plus annexes and an executive summary not exceeding two pages.

The Draft Report(s) shall be submitted to NORAD and the Embassy within one week after the appraisal mission for comments. Comments shall be provided within two weeks after the receipt of the draft report.

The final report shall be completed within two weeks after consultations with and comments have been received from NORAD and the Embassy and forwarded by e-mail and 10 hardcopies to NORAD.

## **Annex B: List of Informants**

### ***Ministry of Finance, Planning and Economic Development***

Mr. Lawrence Kiiza, Director, Department of Economic Affairs

Mr. Emmanuel Nyirinkindi, Director, Utility Reform Unit

### ***Ministry of Energy and Mineral Development***

Mr. Reuben J. Kashambuzi, Commissioner, Petroleum Exploration and Production Department (PEPD)

Mr. Ernest Rubondo, Assistant Commissioner, PEPD

Mr. Robert Kasande, Principal Geologist, PEPD

Mr. Henry Bidasala-Igaga, Principal Energy Officer, Electric Power Division (EPD), ERD

Mr. Fred Sajjabi, Senior Energy Officer, EPD/ERD

Ms. Joan Kayanga, Energy Officer, EPD/ERD

Mr. Albert I. Rugomayo, Coordination Manager, Energy for Rural Transformation Programme, Energy Resources Department (ERD)

Mr. Alex Jageenu, Principal Personnel Officer, Administration and Finance

Mr. James Luyinda, Administration and Finance

### ***Bank of Uganda***

Mr. Joram Kahihenano, Acting Governor, Executive Director/Administration

Mr. David Asiimwe Kihangire, Director, Research Department

Mr. Charles A. Abuka, Assistant Director, Research Department

Ms. Santa Drale, Real Sector Section, Research Department

Mr. Kenneth Egesa, Balance of Payments Section, Research Department

### ***Rural Electrification Agency***

Mr. Godfrey Turyahikayo, Executive Director

Mr. Thomas Engell, Consultant (Carl Bro)

Mr. Christian Grønlund, Consultant (K2-Consult)

### ***Uganda Energy Transmission Company, Ltd***

Mr. Gerald Muganga, Acting Managing Director/Manager, Engineering (Services)

Mr. William K. Kiryahika, Manager, Engineering (O&M)

Ms. Florence Najjemba Musoke, Manager, Finance, Accounts and Sales

Mr. Frederick C. Zesooli, Manager, Human Resource and Administration

Mr. James Soobi, Principal Internal Auditor

Mr. Dennis Wawala, Company Secretary

Mr. Tom Allerbrand, Consultant (Allerbrand Development AB)

Mr. Martin Allerbrand, Consultant (Allerbrand Development AB)

***Embassy of Norway***

Mr. Geir Hermansen, energy adviser

***Embassy of Sweden***

Ms. Maria Selin, 1. secretary

***Statnett, Norway***

Mr. Lars Teigset

Mr. Svein Storstein Pedersen

***Independent Consultants, Norway***

Mr. Einar Bandlien, Bridge Group (petroleum)

Mr. Øyvind Ulfsby (power)

## **Annex C: Documents Consulted**

- Bandlien, Einar H. and Øyvind Ulfsby (2005): "Consultant Support to the Ministry of Energy and Mineral Development in Uganda regarding Formulation of Petroleum and Electricity Sector Development Programmes". Bridge Group, Oslo, 22 March.
- Holtedahl, Truls; Wolfgang Mostert and Yese Mubangizi (2005): "Uganda Energy SWAP". Draft report, Oslo, May.
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- Ministry of Finance, Planning and Economic Development (2004): "Poverty Eradication Action Plan – 2004/5 – 2007/8". Kampala.
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- Norwegian Embassy (2005): "Terms of Reference for a Fact Finding Mission to assess the Possibility of a Sector Wide Approach (SWAP) to the Energy Sector in Uganda". Kampala, 16 February.
- Petrad (2004): "Norsk Utviklingssamarbeid og Internasjonalisering på Petroleumssektoren" (*"Norwegian Development Cooperation and Internationalisation in the Petroleum Sector"*). Oslo, November
- Privatisation and Utility Sector Reform Project (2004): "Uganda Electricity Transmission Company: Management Diagnostic Study". Draft Final Report, Kampala, October.
- Republic of Uganda (2005): "National Budget and Framework Paper for Financial Years 2005/06 – 2007/08". Kampala.
- Statnett (2004): "Institutional Cooperation between Uganda Electricity Transmission Company Ltd (UETCL) and Statnett SF". Project Document, 3<sup>rd</sup> draft, Kampala/Oslo, 1 October.