NI 43-101 Preliminary Economic Assessment
Madaouela Uranium Project
Republic of Niger, Africa

Prepared for:

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Effective Date: January 31, 2011
Report Date: March 08, 2011

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Summary (Item 3)

The Madaouela Uranium Project is located near Arlit, in north central Niger, in one of the most significant areas of producing sandstone-hosted uranium deposits in the world. The Madaouela Uranium Project is controlled 100% by GoviEx Niger Holdings Ltd. (GNH Ltd.), a wholly owned subsidiary of GoviEx Uranium Inc., a private company; collectively referred to herein as GoviEx.

The Madaouela Uranium Project is an advanced stage exploration property, for which historical and current drilling has linked two previously known and separate deposits (Marianne and Marilyn), has defined a third separate resource area at Madaouela South (MAD South), and at which exploration is ongoing on multiple additional targets with encouraging results. Current Project resources are stated in Table 1.

The Project is actively being explored by GoviEx, has numerous defined exploration targets, and has significant exploration potential (in SRK's opinion), with continued success in drilling, to more than double the total current resources; however, SRK cautions that an exploration potential cannot be relied upon until further drilling and sampling is done to properly assess that potential. GoviEx has conducted additional exploration drilling since March 2010 that has been successful in defining a significant deposit of low grade mineralization at the Miriam deposit, which is located southeast of the Marianne-Marilyn and MAD South deposits. The Miriam deposit is further described in this report. Resource estimation will be updated in the near future to include the Miriam deposit, and any other sufficiently defined resource areas.

Metallurgical testing, conceptual mine design, and conceptual processing options have been studied at Scoping Study level to complete a Preliminary Economic Assessment (PEA) for potential project development, which is the focus of this technical report. Mining is conceptual as room and pillar mining with decline access at a combined 4,200tpd production rate from Marianne-Marilyn and MAD South concurrently. The base case processing option is radiometric sorting, milling and two-stage tank acid leaching, with dry stack tailings. A heap leach option is further discussed in this report, as an alternative process option pending further study.

The proposed base case envisions a 2.7Mlb per year U_3O_8 yellowcake production rate, and an 85% ultimate recovery; generating a fifteen year mine life. The base case project economics for this PEA at a long-term uranium price of US$65/lb U_3O_8 are positive, and indicate an after-tax NPV of US$237million at an 8% discount rate, with an IRR of 22%. Initial capital costs are estimated at US$218million, total life-of-mine (LoM) capital costs at US$609million, and cash operating costs of US$22.43/lb U_3O_8. The Madaouela Uranium Project is sufficiently attractive from a technical and economic perspective that it justifies pursuit by GoviEx toward further resource definition, pre-feasibility study, and project development.

Using data from TradeTech's "Long Term Uranium Price Indicator" as published in http://www.uranium.info, a three year trailing average of monthly long term prices from the period April 2007 to March 2010 (when economic modeling was initiated) was calculated to be $77.81. For the same period, the "TradeTech Uranium (Weekly) Spot Price indicator" was calculated to be approximately $65.89. A sales price of $65.00 was used in the base case economic analysis, being significantly below the three year average long term price but nearly at the three year average spot price, which is below the current spot price.

Property Description and Location

GoviEx controls approximately 2,266km^2 of mineral ownership that covers the project areas of uranium mineralization, and the areas of exploration potential. The property consists of five contiguous land tenements, known as Madaouela I through IV, and Anou Melle.

The property is located in the Agadez region (Arlit Department), in the Northern central part of Niger (Western Africa), southeast from the town of Arlit and west of the Aïr Mountains. The town of Arlit was founded as a mining town, when the first uranium deposits were discovered by the French (Commissariat à l'Energie Atomique (CEA)) in the 1960's. Arlit is located a distance of approximately 800km by air northeast from the capital city Niamey.

Ownership and History

The French (CEA) discovered the Madaouela uranium mineralized areas in the early 1960s. They conducted drilling operations using drilling grids of 800m down to 100m, over large areas of the permit. The discovery of the Marilyn deposit was then drilled locally at 50m and less spacing and an underground mining test was implemented for detailed sampling, and investigations into the global rock quality from a mining perspective. CEA also discovered the other deposits that are the current active mines in the area (Somaïr and Cominak operations), and subsequently ceased exploration work on Madaouela in 1967.

The Japanese Power and Nuclear Fuel Development Corporation (PNC) conducted additional uranium exploration work up to 1992 and produced a report on the feasibility of the Madaouela deposit in 1993, which was later updated in 1999. Historical mineral resources/reserves were stated at 5 to 15Mlb U_3O_8, depending upon the cut-off used.

GoviEx acquired five mineral tenements in 2007, Madaouela I, II, III, IV, and Anou Melle, covering the historical resource areas drilled by CEA and PNC. Exploration efforts to-date by GoviEx have been concentrated on the Madaouela I tenement, primarily as definition drilling.

The mineral exploration rights of the Madaouela property have been secured by GNH Ltd., after the signing on May 26, 2007 of the Madaouela I Mining Convention (MIMC) together with its Side-Agreement (MIMC-SA) between the State of Niger and GNH Ltd, as well as the Madaouela II, III, IV and Anou Melle Mining Conventions. The MIMC and MIMC-SA include and describe the respective rights and obligations of each of the signing parties for the management of the exploration program, and stipulate which further steps would apply should an ore deposit be discovered on the property.

The Exploration Title attached to the Madaouela I property is known as "Madaouela I" (MIET), and similarly for Madaouela II, III, IV, and Anou Melle tenements. Legal title to the property vested is GNH Ltd. on publication of Order No. 50/MME/DM dated June 4, 2007, published in the State of Niger official gazette. Exploration rights apply primarily to uranium-bearing minerals but also encompass other related minerals that could be discovered on the property.

Taken together, the Mining Convention and the Exploration Title define the exploration and development rights of GoviEx for all five tenements that comprise the entire Madaouela Uranium Project. The MIET is kept in good standing by conducting exploration work according to the work program agreed between GoviEx and the Republic of Niger. GoviEx has been very actively conducting exploration work on the property, with as many as five drill rigs in operation, since securing the tenements.

Geology and Mineralization

The Madaouela Uranium Project is located in the Tim Mersoi Basin, a sub-basin of the Phanerozoic Iullemeden Basin developed on the Proterozoic West-African shield basement. This basin covers most of the western part of the Republic of Niger with extensions in Algeria, Mali, Benin and Nigeria. In the Madaouela area, the total thickness of the sediments in the basin is estimated at up to 1,500m.

During the Lower Carboniferous time period, the Madaouela Uranium Project was an area of continental sedimentation, as large river deltas with reduced sedimentary environments in temperate climates, and resulting in the formation of deltaic sandstone channel deposits. The Madaouela uranium mineralization is localized within a N70-80 trending channel of the Carboniferous age Guezouman sandstone. Uranium mineralization is always localized at the contact between the Guezouman sandstone and the underlying Talak argillite; following the reducing unit of the Talak, and always associated within the coarse sandstone of the basal Guezouman. Uranium mineralization is found in association with carbonaceous material and pyrite, as part of a U-Mo-V-Zn-Zr deposition phase. Uranium is the only element of potential economic interest at present.

The Madaouela Uranium Project contains sandstone-hosted uranium deposits, which are defined as epigenetic concentrations of uranium minerals occurring as impregnations and replacements primarily in fluvial, lacustrine, and deltaic sandstone formations. They occur in permeable medium-to-coarse grained sandstone, deposited in continental fluvial or marginal marine sedimentary environments. Impermeable shale or mudstone are inter-bedded in the sedimentary sequence, and often occur above and below the mineralization, as is the case for Madaouela.

The uranium mineralization in these sandstone-hosted deposits typically has precipitated from oxidizing fluids under reducing conditions caused by a variety of reducing agents including: carbonaceous material (detrital plant debris, amorphous humate, and marine algae), sulfides, hydrocarbon and inter-bedded mafic volcanic rock with abundant ferromagnesian minerals. The primary uranium minerals are uraninite, pitchblende, and coffinite, with several secondary uranium minerals. Mineralization occurs frequently near domal structures in the sandstones.

Sandstone-hosted uranium deposits are an important source of uranium representing approximately 30% of the world's known uranium resources and accounting for over 18% of the African uranium deposits in 2007. This style of uranium deposit typically yields small to medium size deposits (10,000 to 50,000t of U_3O_8) characterized by low to medium grade (0.05 to 0.50 % U_3O_8). The deposits are typically arranged in clusters.

Four main types of sandstone deposits have been recognized globally: (1) Basal-type in paleo-valleys incised in basement rock; (2) tabular deposits; (3) roll front deposits; and (4) structural deposits, within sandstone adjacent to a permeable fault zone. The Niger deposits, including Madaouela, belong to the tabular and roll front deposit types.

At the Madaouela Uranium Project, the majority of the uranium mineralogy is present in the less than 100µm fraction. The majority occurs as coffinite in a replacement assemblage of coffinite-sulfide-dolomite replacing illite-chlorite-carbonate that forms the matrix cement to quartz and feldspar clasts of the Guezouman sandstone. Uraninite occurs associated with sulfides and dolomite, in the cement replacement, often in close proximity to organic carbon or associated with marcasite-siderite-hematite nodules. Approximately 60% of uranium occurs as coffinite.

No brannerite type minerals have been confirmed, although Ti-rich coffinite does occur (up to 17% Ti). In addition, some uraninite grains have trace molybdenum concentrations.

Exploration

The Marilyn and Marianne uranium deposits were drilled over a two-year period (1963-1965) by French (CEA) teams using an average 100m square grid. This spacing was considered in 1965 sufficient to define reasonably assured resources (called reserves at that time). Numerous other areas of interest were identified using a much larger grid (from 800m to 400m); however, no further drilling occurred after 1965, with the exception of an area south of Marianne-Marilyn called MAD South. All CEA drilling ended in 1967.

The GoviEx drilling program commenced in August 2008, after the permission to start field works in the vicinity of the Madaouela Army Base (historic Madaouela mining camp) was obtained. The GoviEx work program was based on three objectives:

- Resource definition drilling of Marianne and Marilyn deposit: The priority was to improve the quality of the Marilyn and Marianne resources. The objective was to maximize "Indicated Resources" in per CIM and/or the JORC code. A 50m x 50m grid was presumed necessary to adequately define Indicated Resources, and was the primary drilling objective. The program both increased the classification confidence and the total resource;
- Exploration and resource definition drilling on the MAD South deposit area: On the basis of Marianne and Marilyn, and interpretations from existing CEA historical data, several targets were identified. Mineralization had been intersected by CEA on a large grid (800m x 800m) and by local infill (at 400m x 400m). GoviEx drilling was initiated on those targets with encouraging results. Drilling at 200m and locally 100m grid defined the delineation of one main zone (termed Madaouela South North East or MSNE) and possible roots or satellite extensions of new mineralized zones further south thereof. Drilling continues to in-fill and expand the MAD South deposit; and
- Exploratory drilling between the known deposits.

Drilling was routinely performed using the rotary mud drilling technique, followed by geophysical logging (resistivity and radioactivity). Logging reports are used for depth calibration and drilling chips are logged by the geologists, aided by the geophysical logs. Selective cores were collected to establish a grade radioactivity relationship on the Marianne-Marilyn deposit. Cores were sampled and prepared on the basis of well-recognized industry standards, and assayed for uranium and trace elements by the ALS-Chemex laboratory in Johannesburg, South Africa.

As of January 14, 2010 for Marianne-Marilyn and February 15, 2010 for MAD South, a project-wide total of 2,256 holes have been drilled by GoviEx for 197,400m, including outlying exploration holes and water well testing holes. The database of information is based on calibrated and verified eU_3O_8 determinations from gamma logging probes, an industry standard procedure for determination of in-situ uranium grades. The GoviEx drillhole database is well documented, carefully checked, and adequate to support resource estimation by international reporting standards. The resource database as of February 15, 2010 is the basis for the resources used in the mine scoping studies described in this report. Resources are in the process of being

updated for all deposits and an up-dated resource estimate for all deposits is anticipated in the near future.

As of January 31, 2011, a total of 2870 drillholes have been completed for use in resource estimation for 272,698m.

The Marianne-Marilyn deposit is a nearly flat tabular body of mineralization that spans approximately 5km (N70E direction) by 2km across in plan, and the deposit thickness varies from 0.2m to over 2m (average thickness of about 1.3m). The mineralization occurs at depths from about 30m on the east-end of Marilyn, to approximately 60m in depth in the middle of the Marianne-Marilyn deposit, up to 120m in depth on the west extensions of Marianne; below the relatively flat topographic surface. The stratigraphy gently dips to the southwest, with local minor domal features. Mineralization at MAD South is similar in depth (about 40m deep), grade, and thickness, although not yet defined as large as Marianne-Marilyn in total contained pounds of uranium.

Mineralization at Miriam is shallower, lower grade, and thicker than mineralization at Marianne-Marilyn and MAD South. The mineralization at Miriam represents a near surface, bulk tonnage lower grade style of mineralization that may potentially be amenable to open pit mining.

Mineral Resources

SRK has reviewed the GoviEx in-house methodology for resource estimation, and has independently replicated the GoviEx resource estimation methodology using ISATIS commercial software. The procedure currently used by GoviEx for their resource estimation, and replicated by SRK, is a classic 2D Service Variable method, using a simplified method of regression of thickness (T) and grade-thickness product (GT), independent kriging of T and the residual of the regression (R). The procedures are described in the NI 43-101 Technical Report dated March 17, 2010.

SRK's audit of the GoviEx methodology determined that the choice of a 2D method by GoviEx is reasonable because of the thinness of the intersections. SRK therefore replicated the resource methodology for current drill data through January 14, 2010 for Marianne-Marilyn, and through February 15, 2010 for the MAD South Area (three separate zones; MSNE, MSCE, and MSSE); and developed independent resource estimates. The SRK estimated resources are presented below in Table 1. Mineral resource classifications are compliant with CIM definitions.

Table 1: Madaouela Uranium Project – Current Mineral Resource Estimates (March 2010/February 2011)

Classification	Cut-off Grade (eU%)	Tonnes (Mt)	Grade (% eU_3O_8)	eU_3O_8 (tonnes)	eU_3O_8 (pounds)
Marianne/Marilyn (1) (2010)	**0.04**				
Indicated	**0.04**	**10.75**	**0.162%**	**17,311**	**38,160,000**
Inferred	0.04	1.62	0.140%	2,276	5,020,000
MAD South Area					
Indicated – MSNE (1) (2010)	**0.04**	**3.94**	**0.156%**	**6,133**	**13,520,000**
Inferred – MSNE (1) (2010)	0.04	1.94	0.129%	2,494	5,500,000
Inferred – MSCE (1) (2010)	0.04	1.46	0.175%	2,548	5,620,000
Inferred – MSEE (1) (2011)	*0.04*	*2.1*	*0.157%*	*3,311*	*7,300,000*
Inferred Miriam (2) (2011)	*0.02*	*25.11*	*0.050%*	*12,435*	*27,414,000*
Total Indicated		**14.69**	**0.160%**	**23,443**	**51,680,000**
Total Inferred		**32.23**	**0.072%**	**23,063**	**50,854,000**

(1) Residual Method – Including UA
(2) 3D UC method, very selective (5m x 5m x 1m) from 1m composites
(3) Note: SRK 2010 and 2011 resources at a 0.05% eU_3O_8 (0.04% eU) cut-off grade and a minimum thickness of 0.4 m, with the exception of Miriam which is at a 0.025% eU_3O_8 (0.020%eU) cut-off and no minimum thickness as Miriam has the potential to be open-pit mineralization. CIM Definition Standards for Mineral Resources and Mineral Reserves (November 27, 2010)
(4) Note: 1.0 per mil = 1000ppm = 0.10%eU. And 0.1000% eU = 0.1179%eU_3O_8

Mineral resources that are not mineral reserves do not have demonstrated economic viability. This preliminary assessment is preliminary in nature. It includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary assessment will be realized.

As of the date of this report, additional drilling from February 2010 through January 31, 2011 has defined new resources for the Miriam and MSEE deposits as shown in Table 1 above. These 2011 resources are not used in this PEA. Table 1 listed 2010 resources are still current as new drilling has not yet resulted in re-estimation of resources for those deposits.

Mineralogy / Metallurgy

Initial mineralogical work has defined uranium mineralization present as coffinite (60%) and uraninite (40%) with negligible other phases such as uranium (VI) minerals. There is no evidence of brannerite-group minerals occurring in the deposits currently drilled. Uranium minerals are present as fine grained, typically less than 30µm with occasional grains up to 100µm in size.

A metallurgical program has been initiated by GoviEx at SGS Lakefield, Toronto, on core from Madaouela deposits Marianne and Marilyn. Core sampling was carried out in four different areas. A total of 283kg was shipped for testing. A program of metallurgical bench scale tests

has been completed. Preliminary radiometric sorting tests have indicated that up to 95% of the uranium can be recovered in a mass pull of approximately 45 to 50% of the mineralization. Samples are currently being prepared to be shipped as a bulk sample of approximately 3 to 4t to Mintek of South Africa for assessment in a full scale radiometric sorter.

Mineralogical and metallurgical test results to date are preliminary; however, SRK concludes that the uranium mineralization at Marianne-Marilyn is similar in mineralogy to the existing mines in the district. The Madaouela mineralization is therefore likely amenable to processing and uranium recovery in a similar fashion to the existing uranium processing facilities in the Arlit district. Initial results of metallurgical testing indicate that with radiometric sorting, acid curing and sulfuric acid leaching, recoveries up to 85% are achievable for the mineralization. Additional metallurgical test work is recommended with a goal of optimizing recoveries.

Metallurgical testing thus far has examined the following from three composited samples of Madaouela uranium mineralization in core samples:

- Uranium distribution in size fraction analysis;
- Bond ball mill grindability;
- Bench scale leach testing;
    - Conventional leaching,
    - Strong Acid pugging and acid curing, and
    - Reaction rates.
- Leach feed scrubbing;
- Solid-liquid separation;
- Vacuum filtration;
- Pressure filtration;
- Solvent extraction and precipitation; and
- Tailings mineralogy.

Based on the testwork completed the following conclusions are drawn:

- The Madaouela mineralization is of soft to medium hardness in terms of Bond ball mill grindability, with indices ranging from 9.7 to 13.7kWh/t for a 48 mesh grind;
- Conventional agitated acid leaching resulted in poor recoveries essentially irrelevant of leach conditions (grind size, temperature, acid addition), with about 75% recovered from Comp A, 65% from Comp B and ~ 50% from Comp C under varying conditions;
- When a strong acid pugging procedure was applied leach recoveries were better than 85% for all composites and were about 95% for Comp A;
- The Bulk Leach Final Pulp slurry sample settled optimally when autodiluted to 4% (wt/wt) paired with the addition of 120g/t low-charge density anionic flocculant named CIBA Magnafloc 10. These conditions yielded the following thickener sizing data: $0.09m^2$/tpd thickener underflow unit area (TUFUA), $0.03m^2$/tpd thickener hydraulic unit

area (THUA) and 790m^3/m^2/day initial settling rate (ISR). The solids density of the resulting underflow from the optimum static settling test was 51% (wt/wt) and the supernatant was clear;

- Bulk Leach Final Pulp slurry sample was fed with a pulp that was thickened to ~ 45% (wt/wt) solids using Magnafloc 10 at 120g/t, but the sample was not amenable to vacuum filtration due to limited cake formation after an extended period of elapsed form time (>12 minutes) when filtered on a selection of filter cloths of varying pore sizes; therefore, no sizing data were calculated or reported;
- Pressure filtration was fed with a pulp that was thickened to ~45% (wt/wt) solids using Magnafloc 10 at 120g/t. The filter cakes yielded an average of 24% (wt/wt) moisture and a dry solids capacity range of 51 to 55$kg/m^2/h$. In terms of moisture or dry solids capacity, there was little difference between the results of the tests performed at 60 and 100psi using a 3.7cm chamber. When using a thicker chamber (5.7cm) the cake became less cohesive (unstable) without substantially increasing throughput or decreasing residual cake moisture;
- There was a significant amount of solids turbidity present in the filtrate from the pressure filtration tests. There was an average of 9% (wt/wt) of solids in the filtrate. However, the solids were released only within the initial 10 seconds of elapsed form time;
- The uranium from the bulk leached PLS was effectively extracted using a conventional organic extractant (Alamine336), and some Mo co-loading was observed;
- The loaded organic was effectively stripped with 1m Na_2CO_3 solution resulting in a clean loaded strip liquor proceeding to precipitation; and
- Uranium was precipitated from the strip liquor using excess caustic at a pH of about 13. Better than 99.5% precipitation efficiency was achieved in 6 hours at ambient temperature. The precipitate contained 59% U.

The preliminary mineralogical investigations and metallurgical testwork undertaken indicate that the Madaouela mineralized material can be processed for the recovery of uranium by sulfuric acid leaching, and have pointed to potential treatment routes. No testwork has yet been undertaken to investigate column simulation of heap leaching; however, it is an alternative treatment concept that will be pursued further. The two possible processing options going forward include acid pugging followed by tank leaching as practiced at the nearby Cominak and Sominar operations, and the favored base case option of two-stage agitation acid leaching in a tank leaching environment.

Political Situation

Under the 1999 Niger constitution, a president is limited to two five-year terms. However, President Tandja (elected in 1999 and again in 2004), citing “popular” support, triggered a constitutional crisis in May 2009 by calling for a referendum to replace the 1999 constitution with a new one that would eliminate presidential term limits. Numerous opposition groups opposed the referendum and the Economic Community of West African States (ECOWAS) threatened sanctions against Niger in light of the proposed referendum. On May 26, 2009, President Tandja dissolved the National Assembly, which was set to oppose and potentially block the referendum vote.

Following the dissolution of the National Assembly, a panel of the Niger Constitutional Court (Court) ruled that the proposed referendum was unconstitutional, which decision was later affirmed by the Court. Following the Court's ruling, on June 26, 2009, President Tandja assumed "emergency powers" and announced that he would rule Niger by decree. Three days later he dissolved the Court. In August 2009, a referendum passed that removed presidential term limits and extended President Tandja's term for three years. In October, Niger was suspended from ECOWAS.

On February 18, 2010, the military intervened and removed Tandja from office. The new military junta, calling itself the Supreme Council for the Restoration of Democracy (CSRD), suspended the six-month-old constitution; instituted a 12-hour nighttime curfew; closed national borders; and called on the population to remain calm and help make Niger a "model democracy".

Following the coup, the leaders of the CSRD established an advisory council to review the Niger constitution and to propose amendments. On August 13, 2010, the advisory council proposed approximately 130 amendments, including capping presidential term limits at two five-year terms, amnesty for the perpetrators of the February coup, age limits for presidential candidates, and the reinstatement of the prime minister role in the Niger government. The revised constitution is to be voted on in a referendum to be held October 31, 2010.

The Oct. 31 referendum on the constitution is due to be followed by a January presidential election, a possible March presidential run-off and the swearing in of the new civilian leader in April 2011.

Following the February 2010 coup, all Ministries, including the Ministry of Mines and Energy, have continued to operate normally, under direction of their Secretaries General. GoviEx reports business as usual is ongoing in Niger, and there have been no hindrances or impediments to GoviEx in the usual conduct of it business as a result of the coup or the institution of the transitional government. Although all Ministries have continued to operate in the normal fashion, GoviEx is following the transition closely and has retained certain qualified experts and consultants to quickly assess any new developments as they arise.

Proposed Mining Operations

As a result of mining operations at the adjacent Arlit (SOMAÏR) and Akouta (COMINAK) mines, Niger ranked amongst the ten largest uranium producers delivering in 2005 approximately 7.5% of the world's supply, making Niger the sixth largest uranium producing country in the world. The Madaouela Uranium Project tenements are located in the heart of a significant (worldwide) uranium-producing district, adjacent to the SOMAÏR and COMINAK mines. SRK visited the COMINAK operations, which provide a baseline of information on the potential mineability at Madaouela

SRK's conceptual mining plan for Madaouela considered open pit mining for the shallow portions of the uranium deposits during the early stages of the design process; however, this method was not pursued due to the low deposit height and the consequently high stripping ratio.

Both the Marilyn-Marianne and MAD South deposits are generally flat lying (0-15° slope) with thicknesses varying from 1-3m. Tabular deposits such as these generally lend themselves to room and pillar type mining methods.

Neighboring mines currently use room and pillar underground mining with conventional drill and blast methods. Use of a roadheader or continuous miner was considered as an alternative however the rock is competent and abrasive which is problematic for such machines. The host rock is competent enough to withstand fracturing from blasting using standard rock bolt support.

Both drift-and-fill and room-and-pillar underground mining methods were evaluated based on the following criteria:

- Productivity in a narrow stope height environment;
- Overall extraction ratio for fill and non-fill methods; and
- Ability to negotiate panel scale geological features.

In addition, a resue method will be applied to both these methods in order to reduce the dilution applied to this narrow deposit thickness. In a resue method an initial cut is taken of mineralized material at a narrow height/thickness. The mineralized material is removed, and then a second cut is taken of waste material in order to enlarge the opening for equipment.

The mine design process involved creating a grade-thickness model that was evaluated against an estimated grade-thickness cut-off grade to determine the mineable area of each deposit. Main and secondary access development was designed for all economic areas of the deposits. Stope design was confined to outlining the areas to be mined by a single fleet of equipment and ventilated by a raisebore hole to surface. Panel pillar scale design was not carried out at this PEA stage of the project. Maptek Vulcan software was used for the mine design. The mine design was evaluated against the block model to determine a "potentially mineable resource", as shown in Table 2. The potentially mineable resource has a number of factors applied to take account of planned and unplanned dilution and panel extraction ratio.

Table 2: Madaouela Potentially Mineable Resource (based on Table 1, 2010 Mineral Resources)

Area	RoM (kt)	Grade (%-U_3O_8)	Contained U_3O_8 (klb)
Marilyn	4,920	0.11	12,360
Marianne	6,195	0.12	16,461
MAD South NE	3,688	0.11	8,799
MAD South CE	1,551	0.13	4,367
TOTAL	16,354	0.12	41,987

Mineral resources that are not mineral reserves do not have demonstrated economic viability. This preliminary assessment is preliminary in nature. It includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary assessment will be realized.

The production schedule was prepared for a base case production rate of 4,200tpd using Minemax iGantt software.

Capital and operating cost estimates have been prepared for the 4,200tpd base case option for use in the economic modeling exercise.

The cut-off grades for drift-and-fill and room-and-pillar mining methods are 0.089% U_3O_8 and 0.073% U_3O_8, respectively. In order to apply the cut-off grade to the deposits, it is common practice in thin, tabular deposits, to prepare a grade-thickness (G-T) deposit model and a G-T cut-off. The purpose of the grade-thickness process is to normalize these two variables to a minimum mining height so that thin but high grade areas can be visualized as mineable. Using the equipment fleet selected it is expected that a minimum mining height of 1.5m can be consistently obtained in a split-shot drift-and-fill or room-and-pillar layout. The G-T cut-off is thus 0.134m% U_3O_8 and 0.110m% U_3O_8 for drift-and-fill and room-and-pillar, respectively.

In order to determine which mining method should be used to develop the potentially mineable resource estimate to support the PEA, an exercise was undertaken to compare the economics of the two methods. This was a high level analysis focused on determining the effect of the mining operating cost and extraction ratio differences between the two methods. The analysis and results are discussed in this report.

The room-and-pillar option was chosen for taking forward in the PEA for the following reasons:

- More attractive indicative economics;
- Higher productivity;
- Lower capital cost;
- Lower operating costs; and
- Improved ability to negotiate geologic structure during panel mining.

A resue mining method is recommended in order to reduce the dilution applied to the narrow mineralized zones. The mineralized zones are kept at the bottom of the face so as to minimize the requirement to blast into the underlying Talak argillite. The mineralized zones, which have an average thickness of between 1.0m and 1.2m, are kept within the 1.5m mining height of the first round drilled. The 5m wide face is drilled for a 2.5m advance. After blasting and mucking of the mineralization, a second round is drilled in waste above the mineralization. The waste is blasted and mucked and ground support is applied in the back. Mineralized material is transported by load-haul-dump (LHD) equipment to the conveyor feeder that is located at the entrance to the panel.

Low profile mining equipment capable of operating in a 2.5m mining height will be used. A panel mining fleet will consist of a single boom face drill, a ground support jumbo with fully automated rockbolt installation and a $3m^3$ bucket capacity LHD.

All panel development will be undertaken using 5m wide drifts. A primary pattern of 15m x 15m pillars will be developed during the initial advance through the panel. On retreat from the extremities of the panel, each 15m x 15m pillar will be split by 5m drifts to leave four 5m x 5m pillars. Access for both Marianne-Marilyn and MAD South will be by decline ramp. The main and secondary roadways are a series of three 5m wide parallel roadways separated by pillars with regular connections spaced at approximately 50m intervals. All three drifts will be intake air drifts although the central drift containing the conveyor infrastructure will be very low velocity and flow in order to reduce dust generation. Main and conveyor drifts have been located in order to access the mining panels and to limit the requirement for tramming by LHD's.

The estimate of recovered tonnes was obtained from the stope and development designs evaluated against the block model at a minimum mining width of 1.5m in the panels and 4m in the main access drifts. A recovery factor of 75% was applied in the panels to account for the 5m x 5m final pillars. A recovery factor of 68% was applied to the access drifts to account for the inter-drift pillars. Internal dilution is accounted for by the actual width of the deposit compared to the minimum mining width of 1.5m. All panel and access drift development was diluted by a further 10% to account for blast overbreak and unintentional off-ore mining.

Based on the indicative economics assessment, it was decided to prepare the mining schedule to target a nominal 3,000tpd production rate. The scheduling process resulted in a total mine life of 20 years including the ramp up and tail periods where the operation is not at full capacity. The production rate for the operation is premised on the output of a mining fleet consisting of a drill jumbo, support jumbo and an LHD. In a room-and-pillar environment, each fleet can produce 336tpd. Thus the production rate of 3,000tpd required nine fleets operating between the different deposits at peak capacity. Ore haulage is not a limitation in the design as the conveyor systems presented are capable of significantly increased production rates than required by the 3,000tpd schedule. A review of the 3000tpd schedule highlighted the potential to increase production from additional working areas. A decision was made to pursue this adoption and it had a positive impact on project economics and hence was adopted as the base case. The base case applies 13 mining fleets in order to increase the production rate to 4,200tpd which results in a 15 year life of mine including ramp up and tail periods. The 4,200tpd mining rate was used as the base case for this PEA. Capital and operating costs were estimated accordingly.

Proposed Processing Options

There are three options that were considered for processing the uranium/vanadium mineralization from Madaouela:

- In-situ leaching;
- Heap leaching; and
- Agitation or tank leaching.

Based on published hydrogeology reports of the area it is highly unlikely that the Guezouman sandstone has sufficient effective porosity for it to be successfully leached in an ISR environment. Based on the field and mineralogical evidence this view is supported by the site visit. The in situ recovery option was examined by SRK, and based on the available project data, was discarded as a potential processing option for Madaouela.

Heap leaching offers the advantage of being able to very carefully control solution flow through the broken mineralization in the heap and increase metal recovery due to the finer size of the mineralization particles being leached. Generally the finer the particle size the mineralization is crushed to, the faster the metal will be leached out of the mineralization and greater will be the percentage of metal in the mineralization which is ultimately recovered. Run-of-mine (ROM) heap leaching has been successful with some gold and copper mineralization and should not be ignored as an option for uranium mineralization.

Uranium recovery from the heap leaching option can be expected to be around 75%. Water consumption is expected to be about 0.5 to 1.5m^3/t of mineralized material processed. These estimates, and an estimate of the acid requirements will be firmed up at Madaouela through a

testing program, as initial metallurgical testing was geared for characterization of agitation (tank) leaching.

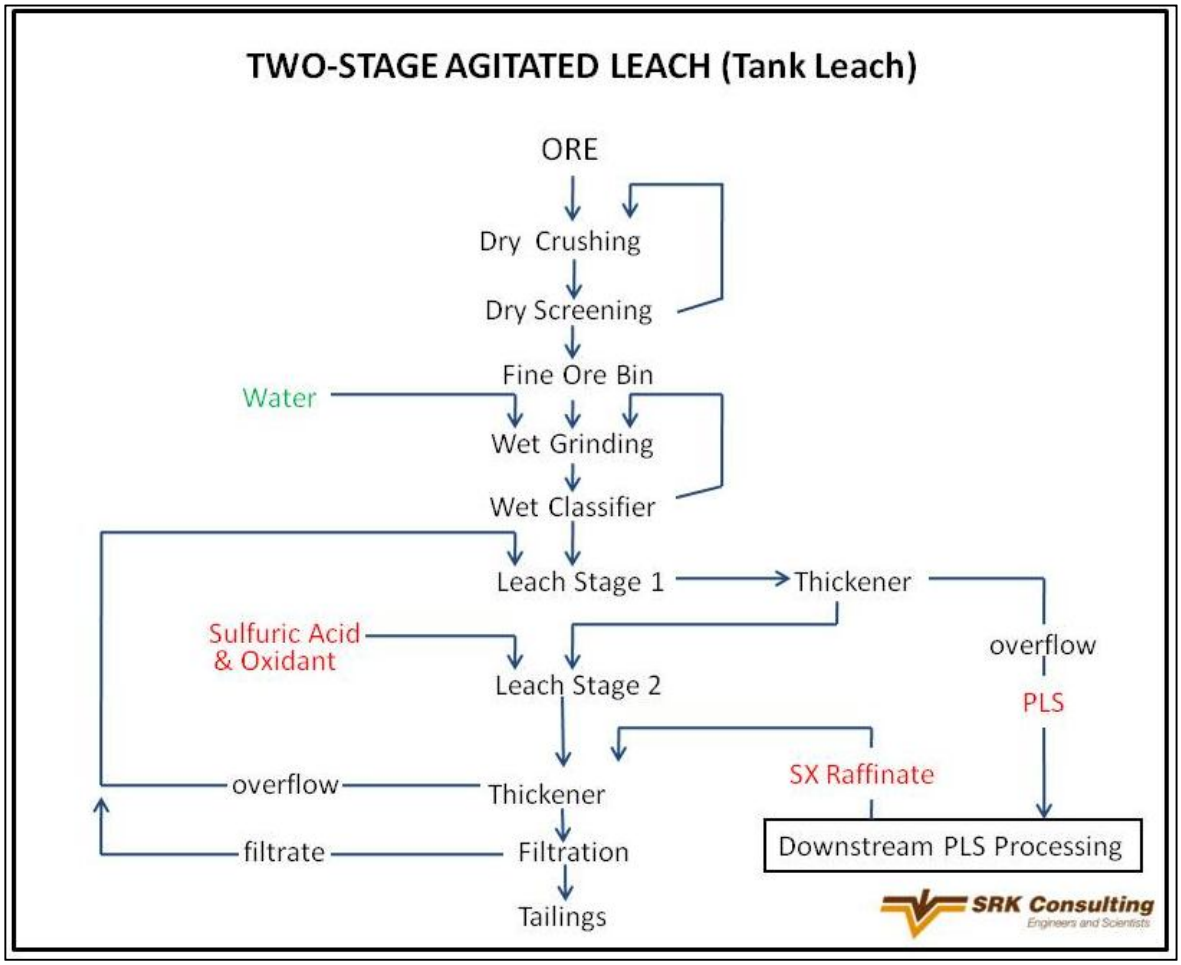
Agitation leaching (sometimes referred to as tank leaching) is the most efficient of the leaching processes being considered in that it will result in the highest recovery of the metal values from each ton of mineralized material; however, this is at a much higher capital and operating cost than a heap leaching option. In agitation leaching the mineralization is mined and crushed as in heap leaching but then is ground to a fine powder and mixed with the leach solution to form a slurry ("pulp") which is agitated in a tank for a sufficient time for the metals to be dissolved. The leached solids in the pulp are then separated from the pregnant leach solution (PLS) which is processed for metal recovery as in the heap leaching option. The leach solids are then stored in a tailing pond.

A potential benefit of tank leaching is that the uranium-bearing material can be separated from the bulk of the mineralization by physical concentration prior to leaching. This can reduce the capital cost of the leaching plant required and the reagent costs. In addition to decreasing the tons treated, the grade is enriched and it is possible to separate out the majority of uranium, above 90%, into a "mass pull" of less than 50%. Such methods include radiometric sorting, scrubbing and size classification, and selective flotation.

Uranium recovery from the agitation leaching option can be expected to be between 85% and 95%. Water consumption is expected to be about $1m^3/t$ of mineralized material processed. These estimates will be firmed up through a testing program at Madaouela.

There are two possible variants of agitation leaching; acid pugging as currently applied at the Cominak and Somaïr mining operations, and two-stage acid leaching. The base case alternative includes the use of radiometric sorting followed by two-stage acid oxidant leaching in tanks. The acid pugging option, a process of strong acid curing prior to tank leaching, was discarded in favor or two-stage acid leaching based on economic and operational considerations. A third option examined, and being considered as an alternative processing option, is heap leaching of crushed material with and without radiometric sorting. Two process flowsheets, for agitation tank leaching and for heap leaching were investigated, and are conceptual in design, with further investigations required to confirm their validity and quantify the design parameters. Downstream PLS processing and recovery of uranium is being considered by standard ion-exchange (CIX) or solvent extraction (SX) processes.

Figure 1: Conceptual Flow Sheet – 2-Stage Agitation (Tank) Leach



Tailings Storage Facility (TSF)

SRK has extracted the design criteria for the Madaouela tailings disposal study from the current project criteria developed, from applicable national and international standards, and where appropriate, from assumptions based on SRK's experience and data gathered from other uranium projects.

The site selected for the proposed TSF and evaporation ponds is covered by loose sand and gravel that constitutes the desert pavement. Based on a cursory visual inspection undertaken by SRK of some test pits that were excavated in the general area of the TSF, it is assumed that the foundation soils consist of a clay layer. The thickness and quality of the clay layer would need to be verified in future studies.

SRK has prepared conceptual designs for two tailings storage options; dry stacked, and thickened tailings disposal.

Based on the analyses undertaken, SRK has made the following conclusions:

- Both thickened and dry stack tailings disposal are feasible;
- There is a net loss of water from the total system;

- Capex cost per tonne of tailings is US$0.80 for dry disposal, and US$0.72 for thickened disposal; and
- Opex cost per tonne of tailings is US$1.89 for dry disposal, and US$1.83 for thickened disposal.

At this conceptual evaluation stage, it is assumed that the dry stack tailings option, as practiced at the AREVA operation in Arlit, is the base case option for Madaouela, for the primary purpose of water conservation and similar capital and operating costs.

For the dry stacked tailings, the stacker would start discharging at the outer wall and gradually advance to the centre of the initial footprint (approximately a circle). It will also rise as it advances to the final height of approximately 34m above the natural ground. Waste rock will be placed to facilitate trafficking on the tailings as required.

The dry stack tailings option consists of an initial tailings storage area of 344,784m^2, and 4 staged evaporation ponds. This site is designed to store approximately 6.6Mm^3 of tailings. The tailings will be stacked conically at a 10 % beach slope angle for the initial years of operations to a maximum height of approximately 34m, and then advance outward.

Hydrogeology

The Guezouman sandstone, host to the uranium mineralization at Madaouela, is considered an insufficient aquifer in the project area based on limited hydrogeological data that suggests low hydraulic conductivity. No quantification has been undertaken regarding the amount of groundwater available in the Tarat and Guezuman aquifers that seem to form the principal aquifers in the area. The main hydrogeological issue is likely to be the quantities of water available for water supply to a processing plant, considering the number of existing and potential future mines in the area and the domestic needs of the Arlit area.

It is noted that the Visean (Tiskakamine), Izegouanda, and Teloua sandstone aquifers have also been identified; however, there is no indication regarding the amount of groundwater in these aquifers, (except that the Visean aquifer is much deeper (>400m) and the water is known to be too high in sulfates for human consumption).

SRK's assumption for this PEA study is that sufficient groundwater will be available from one or more of the aquifers in the project area, to adequately meet mining and processing needs. The limited data available support this assumption; however, SRK recommends a hydrogeological study be initiated in advance of a pre-feasibility study to address the following:

- Delineation of the variability of aquifer characteristics in the target zones (Marianne-Marilyn and MAD South);
- Quantification of the hydraulic connections between the various aquifers in the Madaouela I license area target zones;
- Quantification of the available groundwater resources;
- Estimation of the mine dewatering requirements;
- Assessment of water requirements for processing, mining and potable water supply; and
- Identification and selection of appropriate water supply sources.

The above will be integrated with mine planning details, and geotechnical and environmental aspects of the project. The recommended hydrogeological study will address source and supply of water for mine operations and processing facilities, as well as potable water for potential mine-camp/construction-camp facilities, while examining potential impacts on local usage and environmental impacts to the area.

Environmental / Social / Permitting

Due to the conceptual nature of this study, SRK has not examined the status of existing permits or environmental baseline study information currently available for the Madaouela Uranium Project. SRK has reviewed and discussed in this report the international and local standards to be considered as Madaouela advances toward production.

SRK has undertaken an environmental and social scan involving review of relevant Niger legislation, international standards and readily available information on the environmental and social setting of the project. The environmental and social scan has identified:

- The main environmental and social permissions that will need to be obtained for the project;
- Key environmental and social issues that need to be taken into account during project planning; and
- Work likely to be required to complete an environmental and social impact assessment (ESIA) for the Madaouela Project.

The main environmental and social permission that will be required for the Madaouela Project to proceed is an environmental authorization in terms of the Niger Environmental Code/ Framework Law on the Management of the Environment (Act 1998-56). It will be necessary to complete an ESIA to obtain this authorization. Baseline investigations and stakeholder engagement are essential parts of the ESIA process.

The Niger Mining Code 2006 requires that the Mining License application for the Madaouela Project is accompanied by an ESIA report, including an environmental management program; a site rehabilitation plan; and evidence of environmental authorization in terms of the Environmental Code. In addition to environmental authorization, the Environmental Code requires that authorizations are obtained for emissions and effluent discharges.

Nuclear legislation in place in Niger requires that an authorization is obtained from the National Centre for Radiation Protection (Centre National de Radioprotection – CNRP) for uranium mining and processing operations. Law 2006-17 on Nuclear Safety and Security and Protection requires observance of International Atomic Energy Agency (IAEA) Safety Fundamentals and Safety Requirements.

SRK recommends that GoviEx initiate an environmental study program, in advance of a pre-feasibility study, to address project-specific environmental, social, and permitting issues, and to define a project specific scope of work to be completed in the next 9 to 12 months. In addition, SRK recommends that GoviEx undertake a social reconnaissance study that provides perspective on social factors that can influence project risk and required controls and the information on project stakeholders needed to plan stakeholder consultation.

Preliminary Economic Analysis

SRK completed a preliminary economic analysis for the Project. The base case economic analysis results indicate an after-tax NPV of US$237million at an 8% discount rate, with an IRR of 22%. Payback will be in the third quarter of production Year 4; summary results are shown in Table 3.

The proposed base case envisions a 2.7Mlb per year U_3O_8 yellowcake production rate, and an 85% ultimate recovery; generating a fifteen year mine life. The base case project economics for this PEA at a long-term uranium price of US$65/lb U_3O_8 are positive. Initial capital costs are estimated at US$218million, total LoM capital costs at US$609million, and cash operating costs of US$22.43/lb U_3O_8.

Using data from TradeTech's "Long Term Uranium Price Indicator" as published in http://www.uranium.info, a three year trailing average of monthly long term prices from the period April 2007 to March 2010 (when economic modeling was initiated) was calculated to be $77.81. For the same period, the "TradeTech Uranium (Weekly) Spot Price indicator" was calculated to be approximately $65.89. A sales price of $65.00 was used in the base case economic analysis, being significantly below the three year average long term price but nearly at the three year average spot price, which is below the current spot price.

The SRK LoM plan and economics are based on the following:

- CIM-compliant Mineral Resources;
- An average steady state 4,200tpd mine production rate;
- Radiometric sorting and 2-stage agitation acid leaching at 85% recovery;
- A mine life of fifteen years;
- A cash operating cost of US$22.43/lb U_3O_8;
- Initial capital costs of US$65million;
- Working capital costs at 20% of production costs annually;
- A 30% income tax rate, a 5.5% royalty rate, and an 8% discount rate; and
- No provision for salvage value is assumed in the analysis.

Table 3: Technical Economics Summary – Base Case 2 Stage Tank Leach with Dry Stack Tailings

Description	2-stage Tank Leach Dry Stack Tailings	Units	Amount	$/lb
Production	Development	m	32,661	
	RoM	kt	16,354	
	Grade	%	0.12%	
	Contained	klb	41,987	
	Net Recovery	%	84.6%	
	Recovered	klb	35,521	
	Market Price	$/lb	$65.00	
	Gross Revenue		2,308,849	
	Transportation	$000s	(3,303)	
	Land Royalty	$000s	(2,558)	
	Net Revenue	$000s	2,302,987	$64.83
Production Costs	Mining	$000s	402,902	$11.34
	Crushing & Sorting	$000s	16,109	$0.45
	Processing	$000s	345,470	$9.73
	Tailings	$000s	16,799	$0.47
	G&A	$000s	15,513	$0.44
	Production Costs	$000s	796,792	$22.43
	Cash Cost as % of Revenue	%	35%	
	Margin		1,506,195	$42.40
	Profit Royalty		(180,838)	
	Income Tax		(270,661)	
	Op. Income Less Royalty & Tax		1,054,695	$29.69
Capital Costs	Mining	$000s	135,859	
	Radiometric Sorting	$000s	1,300	
	Processing	$000s	181,669	
	Infrastructure	$000s	12,750	
	Owner Costs	$000s	10,000	
	Mine Closure	$000s	15,000	
	Contingency	$000s	89,145	
	Capital Costs	$000s	445,723	$12.55
	Initial Capital		218,343	
Economics	Cashflow		608,972	
	NPV 8%		237,438	
	IRR		22%	

This PEA has been conducted as a study of the potential underground mineability and conventional agitation leach recovery of uranium from the existing project mineral resources, utilizing industry standard criteria for Scoping Level studies, which is normally at ±35 to 40% on costing estimates. Contingency costs are applied to capital costs at 25%.

Mineral resources that are not mineral reserves do not have demonstrated economic viability. This economic assessment is preliminary in nature. It includes inferred mineral resources that

are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary assessment will be realized.

Conclusions and Recommendations

The Madaouela Uranium Project contains approximately 52Mlb eU_3O_8 as drill Indicated resources, and an additional 51Mlb as drill Inferred resources (of which only 17 Mlb Inferred were used in this PEA), as well as more than 20 individual exploration targets worthy of continued exploration drilling. Continued exploration has and is expected to increase the total resource base, and may change the central locations of a potential processing plant and tailings storage facility. The GoviEx plan during the next 12 months is to aggressively explore the tenements with the goal of determining areas of additional Inferred resources, while pursuing the long lead items and baseline studies necessary for a PFS. This provided the flexibility to re-define the scope and update the PEA prior to committing to a PFS, while not sacrificing the ability to move rapidly to complete a PFS.

SRK has conducted scoping level studies of mining and processing options for the Madaouela Uranium Project, and has developed conceptual project capital and operating costs. The conceptual mine plan results in the production of 42Mlb U_3O_8, and process recovery of 36Mlb U_3O_8, over a fifteen year mine life at a nominal rate of 2.7Mlb per year. A Preliminary Economic Analysis of the proposed mining and processing options results in positive indicative economics with an after-tax NPV of USD$237million at an 8% discount rate, with an IRR of 22%. Initial capital costs are estimated at US$218million, total capital costs at USD$609million, and cash operating costs of USD$22.43/lb U_3O_8. The technical economic results are sufficiently positive to justify continued pursuit of the project toward feasibility level study and project development.

Drilling during the period of February 2010 through January 2011 has resulted in new resource estimates for the Miriam and MSEE deposits, as presented in this technical report, but for which an update to the PEA has not yet been done. Those resources and drilling of extensions to the Marianne-Marilyn and MSNE deposits provide an upside to potentially mineable resources and therefore an upside potential to the economic analysis presented in this PEA. As in-fill drilling occurs on these Inferred resources, GoviEx will determine whether to update the PEA with all updated resources or to proceed to pre-feasibility.

SRK recommends that GoviEx continue the process of moving the Madaouela Uranium Project forward, with exploration drilling, and additional technical studies to assist in the evaluation of preferred mining and processing options that would provide inputs to a feasibility study of the merits of developing a uranium mine. SRK recommends a two-phase program and budget to complete an aggressive exploration program and a full feasibility study; a Phase I program of additional resource definition drilling, interim technical studies, and pre-feasibility level evaluation for project development, followed by a Phase II in-fill drilling program and completion of a feasibility study, contingent upon positive results from Phase I.

A Phase I budget for interim technical studies and pre-feasibility study which will be concurrent with a planned 175,000m per year of exploration drilling throughout the Madaouela 1 through 4 and Anou Melle concessions. Total recommended Phase I costs are estimated at $25,275,000, to complete drilling and a PFS in an 18 month period; to be completed by mid 2012. GoviEx

intends to proceed without interruptions to full feasibility study; therefore, drilling will continue at an aggressive pace in 2012, beyond the PFS completion date.

Contingent upon positive PFS results in the recommended Phase I program, total estimated project costs to conduct a Phase II in-fill drilling program and achieve a full Feasibility Study by the end of 2013 are $41,900,000. Drilling in the second half of 2012 and 2103 is intended to progressively move from exploration drilling to in-fill drilling for maximum conversion to Indicated resource classification.

GoviEx geologists are confident that the exploration potential on all tenements has the possibility to significantly increase the current resources of the Madaouela Uranium Project. In 2010 at the completion of the PEA, SRK was of the opinion that the exploration potential on the entire land position had the potential to more than double. Since that time, GoviEx exploration drilling at MSEE and Miriam has indentified approximately and additional 35Mlb U_3O_8 as Inferred resources (a 50% increase in total contained pounds U_3O_8), confirming the potential to significantly increase total resources. SRK concurs that the entire property position warrants the added exploration effort, can easily justify the magnitude of the proposed drilling program, and does indeed have the potential to significantly increase the current project resources and thus significantly improve the potential economic viability of the Madaouela Uranium Project; however, SRK cautions that an exploration potential cannot be relied upon until further drilling and sampling is done to properly assess that potential.