SOCIO-ECONOMIC IMPACT ASSESSMENT SYSTEM (SEIAS)

REVISED (2020): FINAL IMPACT ASSESSMENT TEMPLATE –PHASE 2

NAME OF THE PROPOSAL: Integrated Resource Plan review

DATE: 25 October 2023

1. Please DO NOT ALTER the template and questionnaire
2. Draft SEIAS report should be accompanied by the supporting documents (draft proposal, M&E plan and pieces of research work)
3. FINAL report will be in PDF format and will be inclusive of the sign-off
4. Sign off forms are only valid for a period of six months.
5. Bills and Regulations that introduce permitting, licensing and registration system must be accompanied by a streamlined process map and indicate the proposed turnaround time for processing of such.

PART ONE: ANALYSIS FOR FINAL SEIAS REPORT

Please keep your answers as short as possible. Do not copy directly from any other document.

1. Conceptual Framework, Problem Statement, Aims and Theory of Change

1.1. **What socio-economic problem does the proposal aim to resolve?**

The Integrated Resource Plan (IRP) is a policy framework that outlines South Africa's long-term energy mix and resource allocation for electricity generation to ensure a reliable and sustainable supply and demand balance. Its first iteration, IRP 2010-2030 was promulgated in March 2012 and was intended to be "living plan" which would require regular revision. The second iteration of the IRP 2019 which was promulgated in October 2019 was implemented through the Risk Mitigation Independent Power Producer Procurement Program (RMIPPPP) and the Renewable Energy Independent Power Producer Procurement Program (REIPPPP). 1998 MW was awarded for the RMIPPPP and 10906 MW was awarded for the REIPPPP. The REIPPPP rolled out bid windows 5 and 6. Bid window 6 revealed challenges relating to grid constraints which triggered the assessment of the developments in the energy sector which have thus necessitated another review of the IRP.

The main socio-economic problem that the IRP aims to resolve is the ongoing electricity crisis caused by an electricity supply deficit, and the impact it has on South Africa's economic growth, employment creation, and social well-being of its citizens.

1.2. **What are the main root causes of the problem identified above?**

What socio-economic problem does the proposal aim to resolve	**What are the main roots or causes of the problem**
The electricity supply deficit , in energy terms was quantified in the Medium Term System Adequacy Outlook (MTSAO22) to be 18TWh in the year 2023. The study further	Key assumptions used in IRP 2019 such as the electricity demand projection, performance of the Eskom generations plant forecasts, and roll out of new generations and grid capacity have changed significantly. The Eskom

What socio-economic problem does the proposal aim to resolve	What are the main roots or causes of the problem
expects the deficit to increase to 30TWh by 2027 due to the anticipated coal-fired power plant shutdowns.	generation performance has since declined increasing the supply deficit, and the anticipated roll out of new generation capacity did not materialize as per the timelines indicated in the IRP 2019. This resulted in an increased electricity supply deficit, rising from 2000MW in 2019 according to IRP 2019 to 18TWh in 2023 as per MTSAO22.
	The relationship between economic growth and electricity has rendered electricity to be referred to as an economic driver. An electricity supply deficit has necessitated the implementation of load shedding to avoid a total power system black out. The load shedding leads to disruptions in power supply resulting in an economic slowdown due to interrupted production in the economic sectors thus negatively impacting the Gross Domestic Product (GDP).
	With reduced economic activity, businesses may not have the financial ability and incentive to expand their operations to recruit new employees. On the other hand, the power supply disruptions caused by load shedding can lead to job losses as companies downsize or shutdown due to the economic slowdown. Additionally local and foreign investment which may potentially create employment opportunities may be

What socio-economic problem does the proposal aim to resolve	What are the main roots or causes of the problem
	discouraged by load shedding as it hinders production.
	Electricity supply deficit compromises the quality of life of the citizens in various aspects including safety and security in the communities; access to essential services such as health care; access to electricity dependent necessities like appliances and communication devices.

1.3. **Summarise the <u>aims</u> of the proposal and <u>how</u> it will address the problem in no more than five sentences**.

The aim of the review of the IRP is to consider two horizons: the first horizon being the period up to 2030 and the second horizon being the period from 2030 to 2050. The first horizon focuses on quantifying the extent of the imbalance in electricity supply and demand to identify interventions that will bring a balance between supply and demand. The second horizon is anchored on the first horizon with a particular focus on the evaluation of different energy pathways to ensure security of electricity supply.

1.4. **How is this proposal contributing to the following national priorities?**

National Priority	Impact
1. Building a capable, ethical and developmental state.	
2. Economic transformation and job creation	Support economic growth through infrastructure development, affordable and reliable energy which will support industrial growth and creation of job opportunities.
3. Education, skills and health	This proposal will open doors for learning and job opportunities. Capacity in the state and its

National Priority	Impact
	entities be strengthened to effectively regulate, plan, and oversee energy delivery.
4. Consolidating the social wage through reliable and quality basic services	Social equity through expanded access to energy at affordable tariffs and through targeted sustainable subsidies for needy households. Reduction in cost of electricity will reduce the cost of livelihood
5. Spatial integration, human settlements and local government	Provision of electricity is one of the services that will ensure spatial equality where previously marginalised communities and new settlements have access to basic services similarly to developed areas. Electricity to be delivered in a financially sustainable way. Provision of this service is also key to support of economic activities in townships and rural areas
6. Social cohesion and safe communities	This will initially result in tensions between labour, government and business as the old coal fired power plants are retired. In the long run with a clear transition plan in place these tensions can be managed.
7. A better Africa and world.	As a continent endowed in critical minerals required for a sustainable energy future, electricity availability will support the mining and beneficiation sector that will provide the necessary products for a sustainable future. The world will benefit from the consumption of these products.

1.5. **Please describe how the problem identified could be addressed if this proposal is not adopted. At least one of the options should involve no legal or policy changes, but rather rely on changes in existing programmes or resource allocation.**

Option 1.	Improvement of the Eskom plant energy availability factor as per Eskom Recovery plan and delay the implementation of the Minimum Emission Standards on Eskom plants. However, this option will be viable until 2030.
Option 2.	Support be rendered to expedite the development of the National Transmission over the next 10 years as per the TDP 2023-2032 to unlock grid capacity for the connection of new generation capacity projects.

PART TWO: IMPACT ASSESSMENT

2. Policy/Legislative alignment with other departments, behaviours, consultations with stakeholders, social/economic groups affected, assessment of costs and benefits and monitoring and evaluation.

2.1. **Are other government laws or regulations linked to this proposal? If so, who are the custodian departments? Add more rows if required.**

Government legislative prescripts	Custodian Department	Areas of Linkages	Areas of contradiction and how will the contradictions be resolved
White Paper on the Energy Policy, 1998	Department of Mineral Resources and Energy	This policy document sets as an objective adoption of the integrated resource planning methodology for the evaluation of further electricity supply investments and the optimization of existing	None.

Government legislative prescripts	Custodian Department	Areas of Linkages	Areas of contradiction and how will the contradictions be resolved
		capacity. This proposal is the execution of this methodology.	
National Energy Regulator Act 40 0f 2004	Department of Mineral Resources and Energy	The Act provides for the establishment and functioning of the National Energy Regulator of South Africa (the Regulator), which exercises the functions under the Electricity Regulation Act, 2006(Act 4 of 2006). The IRP is developed in consultation with the Regulator established by this Act.	None.
Electricity Regulation Act (Act 4 of 2006	Department of Mineral Resources and Energy	This Act defines the Integrated Resource Plan and specifies the role of the IRP in the issuance of a licence by the Regulator.	None.
Electricity Regulations on New Generation Capacity	Department of Mineral Resources and Energy	These Regulations prescribe the activities to be undertaken in relation to the development of the IRP.	None.

2.2. **Proposals inevitably seek to change behaviour in order to achieve a desired outcome. Describe (a) the behaviour that must be changed, and (b) the main mechanisms to bring about those changes. These mechanisms may include modifications in decision-making systems; changes in procedures; educational work; sanctions; and/or incentives.**

a) **What and whose behaviour does the proposal seek to change? How does the behaviour contribute to the socio-economic problem addressed?**

The proposal seeks to change the behaviour of national government departments and state-owned entities whose mandates have an impact on the electricity sector. It seeks to change the silo and reactive approach to policy development and its implementation. This approach currently focuses on achieving individual mandates instead of leveraging on concerted efforts to restore security of supply and therefore the economy and social well-being of the citizens. With a silo approach, the efforts of one stakeholder may hinder the mandate of another, whereas with a consolidated approach efforts may complement the mandates of another.

b) How does the proposal aim to bring about the desired behavioural change?

The review of the IRP considers in its development the mandates of national departments and state-owned entities who impact the electricity sector and makes recommendations on the role they are to play in addressing the electricity supply and demand imbalance. The plan also outlines the areas of support they may require.

2.3. **Consultations**

a) Who has been consulted inside of government and outside of it? Please identify major functional groups (e.g. business; labour; specific government departments or provinces; etc.); you can provide a list of individual entities and individuals as an annexure if you want.

Consulted Government Departments, Agencies and Other Organs of State

Department's name	**What do they see as main <u>benefits, Implementation/ Compliance costs and risks?</u>**	**Do they <u>support</u> or <u>oppose</u> the proposal?**	**What <u>amendments</u> do they propose?**	**Have these amendments been <u>incorporated</u> in your proposal? If yes, under which section?**
Department of Forestry, Fisheries & Environment (DFFE)	Benefits: Consideration of the carbon tax. Implementation: Considerations of the *Minimum Emission Standards regulations under the National Environmental Management: Air Quality Act (NEMAQA) 39 of 2004.* Risk: Implementation of the Minimum Emission Standards regulations worsens the electricity supply deficit.	Support.	They propose alignment of the IRP with their Sector Emissions Targets (SETS) plan.	Yes, the IRP studies the same horizons as the SETS plan.

Department's name	**What do they see as main benefits, Implementation/ Compliance costs and risks?**	**Do they support or oppose the proposal?**	**What amendments do they propose?**	**Have these amendments been incorporated in your proposal? If yes, under which section?**
National Treasury	Benefits: Input data assumptions used will be reflective of the truest state of the economy.	Support.	The use of Medium Term Budget Policy Statement 23 (MTBPS23) economic parameters.	Not yet, the parameters will be made available to the DMRE by NT post the MTBPS 23.
National Energy Regulator of South Africa (NERSA)	Benefits: The IRP seeks to maintain the socio-economic status of the so-called coal economy communities through repowering and delaying the shutdown of eligible coal fired power stations.	Support.	None.	N/A
Department of Mineral Resources & Energy	Benefits: Consideration of Carbon Tax Repowering of coal-fired power plants with technologies of the	Support.	None.	N/A

Department's name	What do they see as main benefits, Implementation/ Compliance costs and risks?	Do they support or oppose the proposal?	What amendments do they propose?	Have these amendments been incorporated in your proposal? If yes, under which section?
	similar characteristics. Alignment of the plan with other DMRE plans.			
IPP Office	Benefits: The IRP reveals the need for the procurement of dispatchable generation options to provide the necessary energy and can be adapted to the power system requirements in a relatively short space of time. Risks: Projects not reaching financial close.	Supported.	None.	N/A

Department's name	What do they see as main benefits, Implementation/ Compliance costs and risks?	Do they support or oppose the proposal?	What amendments do they propose?	Have these amendments been incorporated in your proposal? If yes, under which section?
	Projects not acquiring Environmental Impact Authorization (EIA).			

Consulted stakeholders outside government

Name of Stakeholder	What do they see as main benefits, Implementation/ Compliance costs and risks?	Do they support or oppose the proposal?	What amendments do they propose?	Have these amendments been incorporated in your proposal?
Eskom Generation	Benefits: The IRP provides empirical evidence of the how crucial the expediting of the Eskom Recovery Plan is to for achieving securing of supply. Implementation: Eskom is critical to the implementation of the IRP. Expediting the required interventions results in a resolving the electricity supply	Support.	Inclusion of Distribution industry and Demand Side Management interventions in the IRP for a complete picture of the electricity industry.	No.

Name of Stakeholder	What do they see as main benefits, Implementation/ Compliance costs and risks?	Do they support or oppose the proposal?	What amendments do they propose?	Have these amendments been incorporated in your proposal?
	deficit in the short term. Risks: Non-execution of required interventions.			
Eskom Grid Planning	Benefits: Considerations of the grid in the IRP will mitigate the challenges currently experienced in the implementation of IRP 2019. The IRP leverages on existing grid for repowering and delayed shutdowns. Implementation: The power system requires extensive transmission line new build and upgrades over horizon 1. Support is required in this regard to expedite as per timelines indicated in the Transmission Development Plan 2022-2032. Risk: Based on the historical trend on transmission new build and	Support.	None.	N/A

Name of Stakeholder	What do they see as main benefits, Implementation/ Compliance costs and risks?	Do they support or oppose the proposal?	What amendments do they propose?	Have these amendments been incorporated in your proposal?
	upgrades, the required new build and upgrades may not be achieved as per timelines. Servitude acquisitions. Budget availability.			
Minerals Council of South Africa	Benefits: IRP considerations of their contributions to alleviate the electricity supply deficit. Risks: Projects not reaching financial close. Projects not getting grid capacity allocation.	Support.	None.	N/A
University of Cape Town	Benefits: IRP use of recent demand forecast which considers sector specific forecasts.	Yes.	None.	N/A

b) Summarise and evaluate the main disagreements about the proposal arising out of discussions with stakeholders and experts inside and outside of government. Do not give details on each input, but rather group them into key points, indicating the main areas of contestation and the strength of support or opposition for each position.

There were no disagreements at this stage.

2.4. **Describe the groups that will benefit from the proposal, and the groups that will face a cost. These groups could be described by their role in the economy or in society. Note: NO law or regulation will benefit everyone equally so do not claim that it will. Rather indicate which groups will be expected to bear some cost as well as which will benefit. Please be as precise as possible in identifying who will win and who will lose from your proposal. Think of the vulnerable groups (disabled, youth, women, SMME), but not limited to other groups.**

List of beneficiaries (groups that will benefit)	How will they benefit?
Entire RSA population	• Availability of electricity supply. • Renewable energy technologies can be deployed closer to points of use and therefore can be used for providing energy in rural and remote areas. • At grid scale, energy mix that includes renewable other forms of distributed energy provides economic opportunities to rural communities in other parts of the country where there was very little or no economic activity. • These communities will benefit through employment and empowerment opportunities created. • The updated IRP will also ensure that the development of electricity infrastructure which is based on least economic path takes advantage of lower technology costs which will translate into low tariffs for consumers.
Investors and players in the electricity sector	The plan will give policy signal on investment opportunities based on the outcomes of the two study horizons. Horizon 1 quantifies the electricity supply deficit, and interventions required to close this supply gap. Horizon 2 will provide policy direction in terms of energy pathways which will inform the energy mix for the electricity sector.

List of beneficiaries (groups that will benefit)	How will they benefit?
All economic sectors (e.g. Manufacturing and Mining Sector)	The economy will benefit from availability of reliable and affordable electricity to drive growth.
Emerging players (New entrants or participants) in the energy sector.	• New infrastructure development opportunities will be created on the basis on the IRP. • Emerging technologies open for the establishment and growth of new industries. • In line with commitments to improve participation by local players in the grid scale Independent Power Producer Programme, there will be an increased role for emerging companies to partner with large international corporations.
The Unemployed (especially the youth)	New job opportunities will be created in the new infrastructure development and supporting industries such as hospitality, food, and transport in the immediate project locations.

List of cost bearers (groups that will bear the cost)	How will they incur / bear the cost
Electricity consumers	• User pays principle applies for the users of electricity. Therefore, costs will be passed through to the customer through the tariff.
The Coal to Power Sector	• Employees at old power stations and mines that will be decommissioned at end of their life will have to find alternate jobs. • Contractors and suppliers and their employees across the value chain will have to find alternate markets for their goods and services. • Eskom and coal mining companies will incur the costs of decommissioning and rehabilitation of mines and power stations.
Government (National, Provincial & Local)	Government will have to make resources available to ensure that the towns and communities are built on the back of power plants remain economically viable when the mines and power plants are no longer in production.

2.5. **Describe the costs and benefits of implementing the proposal to each of the groups identified above, using the following chart. Please do not leave out any of the groups mentioned, but you may add more groups if desirable. Quantify the costs and benefits as far as possible and appropriate. Add more lines to the chart if required.**

Note: "Implementation costs" refer to the burden of setting up new systems or other actions to comply with new legal requirements, for instance new registration or reporting requirements or by initiating changed behaviour. "Compliance costs" refers to on-going costs that may arise thereafter, for instance providing annual reports or other administrative actions. The costs and benefits from achieving the desired outcomes relate to whether the particular group is expected to gain or lose from the solution of the problem.

For instance, when the UIF was extended to domestic workers:

- *The implementation costs were that employers and the UIF had to set up new systems to register domestic workers.*
- *The compliance costs were that employers had to pay regularly through the defined systems, and the UIF had to register the payments.*
- *To understand the inherent costs requires understanding the problem being resolved. In the case of UIF for domestic workers, the main problem is that retrenchment by employers imposes costs on domestic workers and their families and on the state. The costs and benefits from the desired outcome are therefore: (a) domestic workers benefit from payments if they are retrenched, but pay part of the cost through levies; (b) employers pay for levies but benefit from greater social cohesion and reduced resistance to retrenchment since workers have a cushion; and (c) the state benefits because it does not have to pay itself for a safety net for retrenched workers and their families.*

Group	Implementation costs	Compliance costs	Costs/benefits from achieving desired outcome	Comments
Department of Mineral Resources and Energy	Costs related to editing, translating into other official languages, and gazetting of IRP the documents.		Policy certainty brought by up-to-date plans which attracts investment into electricity infrastructure.	None.
Other Government Departments	Costs relating to the alignment of their strategies and plans.		This will result in efficiencies which will release duplicated resources for use or application whey they are needed the most.	None.
SOE's	Costs relating to the alignment of their strategies and plans.		This will result in efficiencies which will release duplicated resources for use or application whey they are needed the most.	None.
National Energy Regulator of South Africa (NERSA)	Cost related to the undertaking of Compliance monitoring and enforcement.		Policy certainty brought by policies or regulations that talk to current industry developments far outweigh the cost of additional resources required to regularly review and update policies and regulations.	None.
Investors	Costs relating to the conduction of pre-feasibility studies.	None.	The desired outcome will help investors plan better and therefore efficiently manage their expectations and associated costs	None.
Labour	Financial and human resources associated with necessary details / work to	Minimal	The benefits of an agreed transition path / plan far outweigh the cost	None.

Group	Implementation costs	Compliance costs	Costs/benefits from achieving desired outcome	Comments
	support the discussions.		that the disagreement on IRP can lead to. Which is delayed or no investment in infrastructure which can result in power shortages.	
Civil Society	Financial and human resources associated with necessary details / work to support the discussions	Minimal	The benefits of consensus reached through transparent and open engagements far outweigh the cost that the disagreement on IRP can lead to. Which is delayed or no investment in infrastructure which can result in power shortages.	None.
National Research Councils and Academic Institutions	No.	Alignment of research to support current strategies	This will result in efficiencies which will release duplicated resources for use or application whey they are needed the most.	None.
Donor Countries	No	Alignment of Donor funding to a single strategy and plan	This will result in efficiencies which will release duplicated resources for use or application whey they are needed the most.	None.
Expert Review Panel	Financial and human resources associated with necessary details / work to support the reviewing of the plan.	Minimal.	Benefit from the assurance that the IRP was audited by independent external professionals.	None.

2.6 Cost to government: Describe changes that the proposal will require and identify where the affected agencies will need additional resources

a) Budgets, has it been included in the relevant Medium Term Expenditure Framework (MTEF) and

Yes.

b) Staffing and organisation in the government agencies that have to implement it (including the courts and police, where relevant). Has it been included in the relevant Human Resource Plan (HRP)

The programme to procure new electricity infrastructure is managed through the DMRE IPP Office. The office is self-funded through bids fees. The role of the IPP office will have to be firmed up together with governance and funding structure. Funding will also need to be required for resources to conduct identified detailed studies to better inform the post 2030 electricity / energy path.

Note: You MUST provide some estimate of the immediate fiscal and personnel implications of the proposal, although you can note where it might be offset by reduced costs in other areas or absorbed by existing budgets. It is assumed that existing staff are fully employed and cannot simply absorb extra work without relinquishing other tasks.

2.7 Describe how the proposal minimises implementation and compliance costs for the affected groups both inside and outside of government.

While the plan is developed ensuring supply and demand balance at least possible costs, the implementation of the plan is a regulated process. New generation capacity is procured in line with Section 34 of the Electricity Amendment Regulation Act of 2006 as well as the New Generation Regulations.

For groups outside of government (add more lines if required)

Group	Nature of cost (from question 2.6)	What has been done to minimise the cost?
Business	Financial and human resources associated with necessary details / work to support the discussions	Convene meetings online.
Labour	Financial and human resources associated with necessary details / work to support the discussions.	Convene meetings online.

Civil Society	Financial and human resources associated with necessary details / work to support the discussions.	Convene meetings online.
Expert Review Panel	Financial and human resources associated with necessary details / work to support the reviewing of the plan.	Convene meetings online.

For government agencies and institutions:

Agency/institution	Nature of cost (from question 2.6)	What has been done to minimise the cost?
Department of Mineral Resources and Energy	Costs related to editing, translating into other official languages, and gazetting of IRP the documents.	Procurement of one supplier to provide the editing and translating services.
National Energy Regulator of South Africa	Cost related to the undertaking of Compliance monitoring and enforcement.	Holding of stakeholder/customer workshop on compliance and monitoring. Effective compliance programs to identify problems and taking corrective measures.

2.8 Managing Risk and Potential Dispute

a) **Describe the main risks to the achievement of the desired outcomes of the proposal and/or to national aims that could arise from implementation of the proposal. Add more lines if required.**

Note: It is inevitable that change will always come with risks. Risks may arise from (a) unanticipated costs; (b) opposition from stakeholders; and/or (c) ineffective implementation co-ordination between state agencies. Please consider each area of risk to identify potential challenges.

b) Describe measures taken to manage the identified risks. Add more rows if necessary.

Mitigation measures means interventions designed to reduce the likelihood that the risk actually takes place.

Identified risk	Mitigation measures
Improvement of Eskom fleet EAF as per the generation recovery plan not materializing – Horizon 1	Decision makers to be sensitized to the risk for concerted effort and support to the improvement of the Eskom fleet EAF.
No implementation of the planned life extension of the Koeberg nuclear power station- Horizon 1	Implementation should proceed without delays to mitigate against the loss of 1800MW of dispatchable capacity.
Grid development not executed as per TDP.	Support for the development of the National Transmission System over the next 10 years as per the TDP 2023-2032.
Risk of perceptions about the IRP	Develop clear communication plan that will ensure all issues that require clarity are attended to in a proactive manner.
Delayed implementation of the IRP	Expedite the implementation of the IRP as soon as it is approved.

c) What kinds of dispute might arise in the course of implementing the proposal, whether (a) between government departments and government agencies/parastatals, (b) between government agencies/parastatals and non-state actors, or (c) between non-state actors? Please provide as complete a list as possible. What dispute-resolution mechanisms are expected to resolve the disputes? Please include all of the possible areas of dispute identified above. Add more lines if required.

Note: Disputes arising from regulations and legislation represent a risk to both government and non-state actors in terms of delays, capacity requirements and expenses. It is therefore important to anticipate the nature of disputes and, where possible, identify fast and low-cost mechanisms to address them.

Nature of possible dispute (from sub-section above)	Stakeholders involved	Proposed Dispute-resolution mechanism
A potential dispute may arise regarding the implementation of the Minimum Emission Standards and their impact on security of supply.	Eskom, DFFE, & DMRE	Make reference to the achievements thus far the country has with regards to the reduction of greenhouse gas emissions in comparison to the commitments.
The consideration of certain technologies in the plan.	DMRE & non-state actors	The inclusion of an expert panel to review the work conducted in the development of the IRP.

2.9 Monitoring and Evaluation

Note: Sound implementation of policy and legislation is due to seamless monitoring and evaluation integration during the policy development phase. Policies and legislation that are proficiently written yet unable to report on implementation outcomes are often a result of the absence of an M&E framework at the policy and legislative planning phase. It is therefore imperative to state what guides your policy or legislation implementation monitoring.

2.9.1 Develop a detailed Monitoring and Evaluation Plan, in collaboration with your departmental M&E unit which should include among others the following:

2.9.1.1 Provide clear and measurable policy or legislative objectives

2.9.1.2 Provide a Theory of Change clearly describing the following components:

- **Impact: the organisational, community, social and systemic changes that result from the policy or legislation;**
- **Outcomes: the specific changes in participants (i.e. beneficiaries) behaviour, knowledge, skills, status and capacity;**
- **Outputs: the amount, type of degree of service(s) the policy or legislation provides to its beneficiaries;**
- **Activities: the identified actions to be implemented**
- **Input: departmental resources used in order to achieve policy or legislative goals i.e. personnel, time, funds, etc.**
- **External conditions: the current environment in which there's an aspiration to achieve impact. This includes the factors beyond control of the policy or legislation (economic, political, social, cultural, etc.) that will influence results and outcomes.**

- **Assumptions: the facts, state of affairs and situations that are assumed and will be necessary considerations in achieving success**

2.9.1.3 Provide a comprehensive Logical Framework (LogFrame) aligned to the policy or legislative objectives and the Theory of Change. The LogFrame should contain the following components:

- **Results (Impact, Outcomes and Output)**
- **Activities and Input**
- **Indicators (A measure designed to assess the performance of an intervention. It is a quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor)**
- **Baseline (the situation before the policy or legislation is implemented)**
- **Targets (a specified objective that indicates the number, timing and location of that which is to be realised)**

2.9.1.4 Provide an overview of the planned Evaluation, briefly describing the following:

- **Timeframe: when it the evaluation be conducted**
- **Type: What type of evaluation is planned (formative, implementation or summative) – the selection of evaluation type is informed by the policy owners objective (what it is you want to know about your policy or legislation.**

LOG FRAME						
Objectives: An adequate power system where supply meets demand with a reserve margin.						
Impact	**Outcomes**	**Outputs**	**Baseline**	**Targets**	**Activities**	**Inputs**
Security of supply	Adequate electricity supply industry	Improved Eskom power plant performance Procurement of dispatchable generation.	Approximately 18TWh of unserved energy, i.e, demand that cannot be reliably met due to supply-side shortages.	4000 MW dispatchable generation by 2030 30000 MW new build generation capacity between 2030 and 2040.	Eskom to expedite the Eskom Generation Recovery Plan. Eskom to receive support in expediting the Transmission Development Plan. Procurement of new generation capacity.	Budget allocation Human resources Inter-governmental coordination Collaboration with the private sector.

IMPLEMENTATION EVALUATION	
Issuing of Ministerial Determinations	3 months after gazetting of Final review of the IRP
Release of Requests for Proposals into the market	2 months after gazetting of Ministerial Determination
Announcement of Preferred Bidders	2 months after Submission of Bids closing date
Eskom EAF improvement	Every 3 months after gazetting of Final review of the IRP

2.6.1.1 Provide a straightforward Communication Plan (Note: a common assumption is that the target group will be aware of, and understand how to comply with a policy or legislation come implementation. However, increases in the complexity and volume of new or amendment policy or legislation render this assumption false. Hence, the need for a communication plan to guide information and awareness campaigns to ensure that all stakeholders (including beneficiaries) are informed.

See attached Annexure B – Communication Plan

2.7 Please identify areas where additional research would improve understanding of the costs, benefit and/or of the legislation.

The following studies have been recommended to better inform the huge transition post 2030 path. These will equally be applicable for the transition in the short term.

i. Detailed analysis of gas supply options (international and local) to better understand the technical and financial risks and required mitigations for a renewable energy and gas dominated electricity generation mix post 2030.
ii. Detailed analysis of the appropriate level of penetration of renewable energy in the South African national grid to better understand the technical risks and mitigations required to ensure security of supply is maintained during the transition to low carbon future.
iii. Detailed analysis of other clean energy supply options (Coal, Hydro, Nuclear and others) including their associated costs and economic benefits.
iv. Detailed socio-economic impact analysis of the communities impacted by the decommissioning of old coal fired power plants that would have reached their end of life.
v. Detailed analysis of the efficiency of coal fired power station units post repowering to gas fuelled technology.

PART THREE: SUMMARY AND CONCLUSIONS

1. **Briefly summarise the proposal in terms of (a) the problem being addressed and its main causes and (b) the measures proposed to resolve the problem.**
   IRP addresses the problem of the ongoing electricity crisis caused by an electricity supply deficit. Measures proposed to resolve the problem in the short term are the improvement of the plant performance of existing plants, and the procurement of a dispatchable generation option which can be adapted to the power system in a relatively short space of time.
2. **Identify the social groups that would benefit and those that would bear a cost, and describe how they would be affected. Add rows if required.**

Groups	How they would be affected
Beneficiaries	
1. Entire population of RSA	Benefit from an available and reliable electricity supply.
2. Investors and players in the electricity sector	Presented with investment and business opportunities.
3. All economic sectors (e.g. Manufacturing and Mining Sector)	The economy will benefit from availability of reliable and affordable electricity to drive growth.
4. Emerging players (New entrants or participants) in the energy sector.	New infrastructure development opportunities from existing and emerging technologies.
Cost bearers	
1. Electricity consumers	All costs will be passed through to the customer through the tariff.
2. Coal to power sector.	Costs of decommissioning for affected coal power stations and related mines bear the cost of rehabilitation.
3. Government (National, Provincial & Local)	Cost of rebuilding and maintenance of economies which were previously reliant on coal mining and coal-fired power plants.

3. **What are the main risks from the proposal in terms of (a) undesired costs, (b) opposition by specified social groups, and (b) inadequate coordination between state agencies?**
   Main risks include:
   - Potential opposition to the plan due to the inclusion of certain technologies by state and non-state stakeholders.
   - Non implementation of key interventions such as improvement of EAF and grid development.
4. **Summarise the cost to government in terms of (a) budgetary outlays and (b) institutional capacity.**
   Costs to government is limited to editing, translation, and gazetting.
5. **Given the assessment of the costs, benefits and risks in the proposal, why should it be adopted?**

The IRP should be adopted because its implementation unlocks the economic potential to alleviate the country's socio-economic challenges.

6. **Please provide two other options for resolving the problems identified if this proposal were not adopted.**

Option 1.	Improvement of the Eskom plant energy availability factor as per Eskom Recovery plan and delay the implementation of the Minimum Emission Standards on Eskom plants. However, this option will be viable until 2030.
Option 2.	Support be rendered to expedite the development of the National Transmission over the next 10 years as per the TDP 2023-2032 to unlock grid capacity for the connection of new generation capacity projects.

7. **What measures are proposed to reduce the costs, maximise the benefits, and mitigate the risks associated with the legislation?**

8. **Is the proposal (mark one; answer all questions)**

	Yes	**No**
a. Constitutional?	x	
b. Necessary to achieve the priorities of the state?	x	
c. As cost-effective as possible?	x	
d. Agreed and supported by the affected departments?	x	

9. **What is the impact of the Proposal to the following National Priorities?**

National Priority	**Impact**
1. Building a capable, ethical and developmental state	Implementation of the IRP will foster economic growth, lead to sustainable infrastructure development thus improving social welfare whilst upholding ethical considerations.
2. Economic transformation and job creation	Support economic growth through infrastructure development, affordable and reliable energy which will support industrial growth and creation of job opportunities.

National Priority	Impact
3. Education, skills and health	This proposal will open doors for learning and job opportunities. Capacity in the state and its entities be strengthened to effectively regulate, plan, and oversee energy delivery.
4. Consolidating the social wage through reliable and quality basic services	Social equity through expanded access to energy at affordable tariffs and through targeted sustainable subsidies for needy households. Reduction in cost of electricity will reduce the cost of livelihood
5. Spatial integration, human settlements and local government	Provision of electricity is one of the services that will ensure spatial equality where previously marginalised communities and new settlements have access to basic services similarly to developed areas. Electricity to be delivered in a financially sustainable way. Provision of this service is also key to support of economic activities in townships and rural areas
6. Social cohesion and safe communities	This will initially result in tensions between labour, government and business as the old coal fired power plants are retired. In the long run with a clear transition plan in place these tensions can be managed.
7. A better Africa and world.	As a continent endowed in critical minerals required for a sustainable energy future, electricity availability will support the mining and beneficiation sector that will provide the necessary products for a sustainable future. The world will benefit from the consumption of these products.

For the purpose of building a SEIAS body of knowledge please complete the following:

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