

FOR THE ATTENTION OF:

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Re: SAFCEI & ELA-JHB – REPRESENTATIONS ON DRAFT NNR AMENDMENT BILL, 2021

Contents

A.	INTRODUCTION	2
B.	GOVERNANCE ISSUES.....	4
(a)	Transfer of an authorisation	4
(b)	Pre-Construction Activities	6
(c)	Authorisation to Manufacture	8
(d)	Exemptions.....	9
(e)	Regulations on development surrounding any nuclear facility	10
(f)	Exclusion of regulatory control over mining	11
(g)	Vessels.....	11
(h)	Accountability, transparency, openness & oversight	12
C.	PUBLIC PARTICIPATION	13
(a)	Decisions relating to nuclear installation licenses, nuclear site licenses or nuclear vessel licenses.....	14
(b)	Applications for certificate of registration, exemption or authorisation to manufacture ...	16
(c)	Authorisation to transfer	17
(d)	Pre-Construction activities.....	18
D.	STRICT LIABILITY AND LIMITED LIABILITY	18
E.	DISPOSAL OF HIGH LEVEL RADIOACTIVE WASTE	21

1.

A. INTRODUCTION

These representations have been prepared for and are submitted on behalf of the Southern African Faith Communities' Environment Institute (SAFCEI) and Earthlife Africa – Johannesburg (ELA-JHB).

2.

SAFCEI is a registered non-profit organisation that was established by multi-faith environmental and social justice advocates to, among other things, confront environmental and socio-economic injustices, and to support and encourage faith leaders and their communities in Southern Africa to take action on eco-justice, sustainable living and climate change issues. SAFCEI includes an Energy and Climate Justice Programme that focusses on climate change and energy.

3.

ELA-JHB is a non-governmental non-profit voluntary association established by environmental and social justice advocates to mobilise civil society around environmental issues in relation to people, and includes a Sustainable Energy and Climate Change Project that works to promote local and global environmental and social justice on sustainable energy and climate change issues. ELA-JHB is an autonomous branch of Earthlife Africa.

4.

The Department of Mineral Resources & Energy (DMRE) has invited interested and affected parties (I&APs) to submit written representations on the draft National Nuclear Regulator (NNR) Amendment Bill, 2021 ('Amendment Bill').

5.

In SAFCEI and ELA-JHB's view, some of the proposed amendments will have the effect of weakening nuclear safety governance if enacted. For example, nuclear license holders will be able to transfer authorisations to a third party with the written approval of the Regulator's CEO (at which stage that holder's period of responsibility ends, with no conditions or criteria

in the proposed amendments specifying, for example, that the original license holder remains liable should nuclear damage occur at a later stage as a result of design or construction flaws attributable to the original license holder). Furthermore, the proposed amendments will empower the Regulator to permit pre-construction activities to be undertaken to prepare a site for the construction of a nuclear facility, which could potentially precede a nuclear site installation license or nuclear license. If enacted, the proposed amendments will also: extend the CEO's power to grant exemptions by amending the scope of exemptions; empower the Minister to make regulations on development surrounding a nuclear facility after consultation with relevant municipalities (rather than in consultation with relevant municipalities); remove the NNR's regulatory control over mining and processing of radioactive ore; remove the requirement for vessels carrying nuclear materials to obtain a separate authorisation to enter South African waters or ports where such material is being transported for the holder of a separate nuclear authorisation (where this authorisation includes conditions permitting such a holder to transport radioactive materials); exclude nuclear powered vessels of foreign states invited through diplomatic channels from regulatory control under the NNR Act¹; remove the obligation imposed on the Minister to table the annual public report on health and safety related to workers, the public and the environment associated with nuclear sites within a specified time-frame; and delete provisions addressing meetings of the board and keeping of minutes.

6.

Furthermore, the proposed amendments do not address important shortcomings in the current NNR Act. These shortcomings include inadequate provision for procedurally fair decision-making processes (and in particular provisions relating to the public participation in decision-making processes), and continued exposure of the South African taxpayer to the risk of having to bear the cost of nuclear damage should claims for compensation resulting from a nuclear incident or accident exceed the financial security required of the nuclear authorisation holder (which it is submitted is likely should a catastrophic nuclear incident occur as a result of a reactor core meltdown and loss of containment). The amendments will also have the effect of enabling high level radioactive waste generators to 'dispose of' this

¹ 47 of 1999 (as amended).

long-lived and extremely hazardous waste stream by emplacing it (without the intention of retrieval) in long term nuclear waste storage facilities, which would in turn allow such generators to move towards 'closure' at the end-of-life of the nuclear facility in question, leaving the long-term and intergenerational obligation to indefinitely store high level radioactive waste, and eventually find a final disposal solution, to third parties (the cost of which will most likely be borne by current and future generations of South African taxpayers).

7.

SAFCEI and ELA's comments relating to the NNR Amendment Bill are set out in more detail below.

8.

B. GOVERNANCE ISSUES

(a) Transfer of an authorisation

It is noted that one of the reasons for the proposed amendments to the NNR Act is to provide for the **transfer of authorisations**, and that in terms of the proposed definition of '**period of responsibility**', the nuclear authorisation holder's responsibility ends (among other scenarios) on the date on which a nuclear authorisation in respect of the nuclear facility, site or action in question is granted to some other person.² The Amendment Bill seeks to substitute the NNR Act's current prohibition against the transfer of a nuclear authorisation with a provision enabling the holder of an authorisation to transfer the authorisation to a third party with the written approval of the chief executive officer (CEO).³

9.

On the face of it, this proposed amendment will have the effect of facilitating a phased approach to a nuclear new build programme. For example, Eskom would be able to apply for a nuclear site installation license (and engage in pre-construction activities), and at a later date apply to transfer such authorisation to another party subject only to the written approval of the CEO being obtained (and without any public participation in the decision-making

² Section 1(v),

³ Section 25.

process – see further paragraph C(c) below).

10.

The proposed amendment will also enable holders of nuclear licenses (for example nuclear power station licenses) to transfer such licenses (subject to the CEO's approval) to another party. This has significant implications for the holder's responsibilities, and the proposed Amendment Bill does not contain any conditions or criteria to ensure the protection the South African public should an authorisation be transferred (for example - but not limited to - conditions requiring that the original nuclear license holder remains responsible for any design or construction flaws that may be revealed after the transfer, or nuclear damage that occurs as a result of such flaws). Alarming, the holder's 'period of responsibility' (strict liability) ends 'on the date a nuclear authorisation is granted to some other person', while the obligation to give financial security would also end.

11.

This could conceivably lead to a situation where, for example, a holder who profits from the construction of a nuclear installation subsequently step away from its responsibilities (including responsibility for ensuring safety, strict liability for nuclear damage and responsibility to provide financial security) in relation to a nuclear installation by transferring the authorisation to a new holder, leaving that new holder to deal with (among other things) any design or construction flaws that may be revealed after the transfer, or nuclear damage that occurs as a result of such flaws.

12.

This problem is compounded when read with the proposed amended section 30, which stipulates that **only a holder of a nuclear license is**, whether or not there is negligence on the part of that holder, **liable for all nuclear damage** caused by or resulting from the nuclear facility **during the holders 'period of responsibility'**. What would happen, for example, if Party A designs and constructs a nuclear installation, subsequently transfers it to Party B, and subsequently a catastrophic failure of the nuclear installation occurred (such as a worst-case beyond-design nuclear accident such as a reactor core meltdown and containment failure) due to design or construction flaws attributable to the original license holder?

13.

SAFCEI and ELA-JHB are opposed to the NNR Act being amended to allow for the transfer of nuclear authorisations, and are of the view that this provision does not constitute a reasonable or rational legislative measure designed to protect the public, property and the environment from nuclear damage (the main purpose of the NNR Act). On the face of it, the proposed amendment has the effect of creating an enabling environment for a nuclear new build programme (for example by allowing one party to obtain authorisation for a nuclear site and commence pre-construction activities to prepare the site, and at a later date transfer the nuclear site license or nuclear license to a third party), while also allowing holders of nuclear authorisations to escape financial responsibility and strict liability in respect of nuclear damage occurring after the authorisation has been transferred to a third party – including in circumstances where such nuclear damage is as a consequence of design or construction flaws attributable to the original nuclear license holder.

14.

(b) Pre-Construction Activities

The Amendment Bill seeks to introduce a requirement that no person may perform any pre-construction activities without prior written permission of the **regulator**,⁴ the result of which is that the regulator will be empowered to permit such activities (the current NNR Act does not make provision for pre-construction activities to be conducted as a standalone category). The proposed definition of '**pre-construction activities**' indicates that such activities include the preparation of a site for the construction of a nuclear facility, including initial site earthworks and site levelling, preparation of construction roads, borrow areas, security infrastructure, building of a diagram wall and excavation and clearance of bedrock.⁵

15.

On the face of it, this proposed amendment will have the effect of facilitating a phased approach to a nuclear new build programme. For example, it could allow Eskom to prepare the Thyspunt site for the construction of a nuclear power station, and for a nuclear site license

⁴ Section 20(2).

⁵ Section 1(x).

or nuclear license to be granted to a third party at a later stage. Such pre-construction activities are likely to be undertaken before any final decision has been made regarding the specific nuclear reactor design, and before any authorisations required for the construction of a new nuclear power station have been granted.

16.

SAFCEI and ELA-JHB are also concerned that this proposed amendment does not readily reconcile with the National Environmental Act (NEMA)⁶ environmental impact assessment (EIA process). The NEMA EIA Regulations⁷ list as an activity requiring environmental authorisation '**[t]he development** and related operation of facilities or **infrastructure for nuclear reaction** including energy generation, the production, enrichment, processing, reprocessing, storage or disposal of nuclear fuels, radioactive products, nuclear waste or radioactive waste',⁸ and define 'development' as meaning 'the building, erection, construction or establishment of a facility, structure or **infrastructure, including associated earthworks or borrow pits, that is necessary for the undertaking of a listed or specified activity**, but excludes any modification, alteration or expansion of such a facility, structure or infrastructure, including associated earthworks or borrow pits, and excluding the redevelopment of the same facility in the same location, with the same capacity and footprint'.⁹ While on the face of it this (and other) listed activities would be triggered by pre-construction activities, it is probable that the EIA applicant would seek to limit the scope of the EIA to pre-construction activities only, and in the absence of a nuclear reactor design being specified. It is also likely that other important issues that should be addressed in any EIA application for a new nuclear power station would be avoided at this early stage, including issues such as the need for new nuclear power, the desirability of a new nuclear power station, affordability of nuclear power, as well as the risk of catastrophic beyond-design incident (for example should there be a reactor core meltdown and loss of containment).

⁶ 107 of 1998 (as amended)

⁷ GN984 of December 2014 (as amended).

⁸ Ibid, Listed Activity 3.

⁹ Ibid, regulation 2.

17.

The undertaking of pre-construction activities to prepare a site for the construction of a new nuclear facility would also involve the expenditure of large sums of money, which at the very least will put pressure on other decision-makers (including relevant authorities in any subsequent EIA decision-making processes), making it more difficult for such authorities to refuse an application in circumstances where significant funds and effort have already been invested in preparing the site.

18.

In light of the above, SAFCEI and ELA-JHB are opposed to the NNR Act being amended to permit pre-construction activities to be performed in the absence of a nuclear license and NEMA EIA authorisation for a new nuclear facility.

19.

(c) Authorisation to Manufacture

In terms of section 22(1) of the NNR Act, a person wishing to engage in any action described in section 2(1)(c) (i.e. any action capable of causing nuclear damage) **may** apply in the prescribed format to the CEO for a certificate of registration or certificate of exemption. In terms of the Amendment Bill, a person wishing to engage in activities not contemplated in sections 21(1) to (4) **must** apply for (among other things) an **authorisation to manufacture**.

20.

The proposed Amendment Bill stipulates that no person may manufacture or cause to be manufactured components or parts relating to nuclear safety as prescribed in the regulations except under the authority of an authorisation to manufacture.¹⁰ It is noted that the requirement in the Amendment Bill to publish an application and invite comment (discussed further in paragraph C below) does not extend to applications made for 'regulatory evaluation of design for the purposes of construction of a nuclear facility'.¹¹ This effectively bars I&APs and the public from participating in decision-making processes relating to authorisations to manufacture.

¹⁰ Section 20(3).

¹¹ See sections 21(5) and (6).

21.

(d) Exemptions

In terms of s22(1) of the NNR Act, a person wishing to engage in any action described in section 2(1)(c) (i.e. any action capable of causing nuclear damage) **may** apply in the prescribed format to the CEO for (among other things) a certificate of exemption. In terms of the Amendment Bill, a person wishing to engage in activities not contemplated in sections 21(1) to (4) **must** apply for (among other things) a **certificate of exemption**.

22.

The term 'exemption' was not defined in the NNR Act. However, the Amendment Bill seeks to include a definition of 'exemption', namely the '**determination by the Regulator that a source, facility or activity is not subject to some or all aspects of regulatory control, on the basis that the exposure (including potential exposure) due to the source¹², facility¹³ or activity¹⁴ is too small to warrant the application of those aspects, or that this is the optimum option for protection irrespective of the actual level of doses or risks**'.

23.

While it is understood that certain sources, facilities or activities may not pose a significant radiological risk, the power proposed to be given to the Regulator to determine that a source, facility or activity is not subject to some or all aspects of regulatory control on the basis 'that this is the optimum option for protection irrespective of the actual level of doses or risks' is,

¹² Defined in s2 of the Amendment Bill as meaning '*anything that may cause radiation exposure including emission of ionizing radiation, or by releasing radioactive substances or material, and which can be treated as a single entity for protection and safety purposes*'.

¹³ Defined in s2 of the Amendment Bill as meaning '*nuclear facility, irradiation facility, mining, raw material processing facility, radioactive waste management facility, and any other places where radioactive material is produced, processed, used, handled, stored or disposed of, on such a scale that protection and safety is required*'.

¹⁴ Defined in s2 of the Amendment Bill as meaning:

- (a) the use, possession, production, storage, enrichment, processing, reprocessing, or disposal of radioactive material;
- (b) the import and export of radioactive material for industrial, research and medical treatment;
- (c) the transporting, or causing to be transported, of radioactive material;
- (d) manufacturing of design packages intended for storage or transport of radioactive material;
- (e) the site evaluation, design, manufacturing, construction, commissioning, operation and decommissioning of facilities; and
- (f) radioactive waste management activities and site rehabilitation.'

in the view of SAFCEI and ELA-JHB, too vague, wide and unconstrained, and is potentially open to abuse. These shortcomings are compounded by the fact that no provision is made in the NNR Act or Amendment Bill for procedurally fair decision-making in respect of such exemption applications (discussed further in paragraph C(b) below).

24.

In light of the above, SAFCEI and ELA-JHB submit that the definition of exemption be amended (at the very least) to remove the reference to the Regulator making a determination that a source facility or activity is not subject to some or all aspects of regulatory control on the basis ‘that this is the optimum option for protection irrespective of the actual level of doses or risks’.

25.

(e) Regulations on development surrounding any nuclear facility

It is noted that the Amendment Bill proposes amending section 38(4) of the NNR Act to provide that the Minister may on recommendation of the board **and after consultation with the relevant municipalities**, make regulations on the development surrounding any nuclear facility to ensure the effective implementation of any applicable emergency plan.

26.

The effect of this amendment is that instead of being required to make regulations **‘in consultation with’** relevant municipalities¹⁵ (which would require their concurrence or agreement), the Minister will be empowered to make such regulations after simply consulting with such municipalities.

27.

SAFCEI and ELA-JHB submit that the wording ‘in consultation with’ the relevant municipalities should be retained given that has significant implications for municipal planning, which is

¹⁵ The wording contained in the NNR Act for s38(4) is as follows: ‘The Minister may, on recommendation of the board and **in consultation with** the relevant municipalities, make regulations on the development surrounding any nuclear installation to ensure the effective implementation of any applicable emergency plan’.

designated as a functional area of concurrent competence in terms of the South African Constitution.¹⁶

28.

(f) Exclusion of regulatory control over mining

It is noted that the proposed amendments to the NNR Act include the insertion of the definition of ‘**nuclear facility**’, which is defined as meaning any facility within the nuclear fuel cycle ‘other than the mining and processing of ore’.¹⁷ Facilities which only handle radioactive waste resulting directly from the mining or processing of ore are also excluded from the definition.

29.

The rationale for excluding mining and processing of ore (and facilities which only handle radioactive waste resulting directly from the mining or processing of ore) from the definition of ‘nuclear facility’ is unclear. SAFCEI and ELA-JHB are of the view that the Regulator should retain regulatory control over such activities, and that the proposed amendment results in a weakening of governance in relation to nuclear safety.

30.

(g) Vessels

It is noted that in terms of proposed changes in the Amendment Bill, the amended NNR Act will apply to commercial vessels propelled by nuclear power or having radioactive material on board which is capable of causing nuclear damage,¹⁸ but will not apply to naval vessels of a foreign state that are invited to the Republic through diplomatic channels.

31.

SAFCEI and ELA-JHB are of the view that, from a nuclear safety perspective, there is no difference in the risk posed by a naval nuclear-powered ship and a commercial nuclear-

¹⁶ SA Constitution, Schedule 4 Part B. In terms of section 156(1)(a) of the Constitution, a Municipality has executive authority in respect of, and has the right to administer, the local government matters listed in Part B of Schedule 4.

¹⁷ Section 1(o).

¹⁸ Section 2(1)(b).

powered ship. It is submitted that the exclusion of foreign nuclear-powered ships (which may also have nuclear weapons on board) is not rationally connected to the purpose of the NNR Act (which is primarily to provide for nuclear safety and to protect the public in the event of a nuclear incident or accident). It is submitted that the proposed Amendment Bill should not exclude nuclear-propelled naval ships from regulation, and that foreign naval vessels carrying nuclear weapons of mass destruction should be prohibited from entering South African waters and harbours.

32.

While the proposed Amendment Bill applies to commercial vessels propelled by nuclear power or having radioactive material on board which is capable of causing nuclear damage, SAFCEI and ELA-JHB are also concerned that other proposed amendments weaken regulatory control over such vessels. In particular, in terms of the proposed amendments a holder of a nuclear authorisation with a condition or conditions permitting such holder to transport radioactive materials may cause such materials to be transported by a vessel under the authority of such authorisation without a nuclear vessel license or a certificate of registration. On the face of it, this proposed amendment seems to be aimed at creating a permissive regulatory environment making it easier for holders of such nuclear authorisations to import nuclear materials or nuclear fuel (without having to notify the public), and weakens regulatory control over the safety of such activities. In the circumstances, SAFCEI and ELA-JHB submit that proposed amended section 20(6) should be deleted.

33.

(h) Accountability, transparency, openness & oversight

It is noted that the Amendment Bill proposes to substitute section 7(2) of the NNR Act with a watered-down version of the section. While the proposed amendment retains the requirement for the Minister to table in Parliament the annual public report submitted to him or her in terms of section 7(1)(j), it removes the requirement to do so 'within 14 days after it is so submitted if Parliament is then in ordinary session or, if Parliament is not in ordinary session, within 14 days after the commencement of the next ordinary session'. SAFCEI and ELA-JHB submit that the time requirement should be retained in order to promote the foundational constitutional principles of accountability, transparency and openness, and to

ensure that Parliament can effectively carry out its constitutional oversight function by receiving such reports timeously.¹⁹

34.

It is noted further that the Amendment Bill also seeks to repeal sections 10 and 11, which sections address meetings of the board and minutes of board meetings. It is unclear why these sections have been deleted, and it is of concern that the requirement for the board to cause minutes of its meetings to be kept and copies to be circulated to its members will be removed. This potentially waters down good governance within the NNR, and potentially reduces transparency and accountability. For example, in terms of the proposed amendment it would appear that minutes (if taken) will not be required to be circulated to a director – such as the director representing communities which may be affected by nuclear activities – who is excluded from or is unable to attend a meeting or meetings of the board. Furthermore, if the board is not required to take minutes, it also insulates that board from accountability to, for example, parliament in respect of the latter's constitutional oversight function, as well as accountability to I&APs and the public seeking to enforce their constitutional rights (for example, public interest litigants would not be able to access non-existent minutes of meetings that should form part of the record of any decision made by the CEO or Regulator).

35.

C. PUBLIC PARTICIPATION

The nuclear industry in South Africa, with its roots firmly planted in the apartheid-era nuclear arms programme, is characterized by high levels of secrecy, and a lack of transparency and accountability. The NNR Act in its current form and the proposed amendments do not address these failings. Inadequate provision is made for public participation in various decision-making processes relating to the nuclear industry. SAFCEI and ELA-JHB submit that the DMRE should take this opportunity to align the NNR Act properly with the foundational constitutional principles of accountability, responsiveness and openness, and to make

¹⁹ Section 42(3) of the SA Constitution provides that the National Assembly is elected to represent the people and to ensure government by the people under the Constitution, and that it does this by (among other things) providing a national forum for the public consideration of issues and by scrutinizing and overseeing executive action.

provision for meaningful and informed public participation in decision-making processes.

36.

(a) Decisions relating to nuclear installation licenses, nuclear site licenses or nuclear vessel licenses

It is noted that the proposed amendments to be introduced by the Amendment Bill include a requirement that the CEO must direct the applicant for a nuclear installation license, nuclear site license or nuclear vessel license to (among other things) publish a copy of the application in the *Gazette* and two newspapers circulating in the area of every municipality (affected by the decision),²⁰ and that **a person who is directly affected by the granting of a nuclear license**, nuclear site license or nuclear vessel license may make written representations to the board, relating to health, safety and environmental issues connected with the application, within 60 days of the date of publication in the *Gazette*.²¹ In addition, if the board is of the opinion that further public representation is necessary, it must arrange for hearings on health, safety and environmental issues.²²

37.

While the increase of the commenting period from 30 to 60 days is welcomed, the opportunity for I&APs to participate meaningfully in these decision-making process is severely curtailed in other respects.

38.

For example, the proposed amendments also include a provision that would **empower the CEO – without the prior approval of the board – to waive the requirements for serving and publishing an application and for further public representation**.²³ SAFCEI and ELA-JHB submit that this power granted to the CEO is too broad and unconstrained, and is potentially open to abuse. On the face of it, this provision is unconstitutional and incompatible with the constitutional right to procedurally fair administrative decision-making.

²⁰ Section 21(5)(b), read with s21(5)(a).

²¹ Section 21(6)(a).

²² Section 21(6)(b).

²³ Section 21(7).

39.

It is also noted that the proposed amendments provide that the **CEO – subject to the board’s approval – must provide to the applicant written reasons for refusing a nuclear license, nuclear site license or nuclear vessel license.**²⁴ No requirement is included to make these reasons available to I&APs or the public. In addition, if the application is granted, there is no requirement for written reasons for the approval to be given to any party (including I&APs or the public).

40.

The South African Constitution stipulates that everyone has the right to administrative action that is lawful, reasonable and procedurally fair.²⁵ The Promotion of Administrative Justice Act, 2000 (PAJA) has been enacted to give effect to this right, and provides that in order to give effect to the right to procedurally fair administrative action, an administrator must (among other things) give adequate notice of the right to request reasons to any person whose rights or legitimate expectations are materially and adversely affected by the administrative action.²⁶ PAJA also provides regarding administrative action affecting the public that where a public enquiry is held, reasons must be given for any administrative action taken or recommended,²⁷ and that where a notice and comment procedure is followed the administrator must comply with the prescribed procedures to be followed in connection with such notice and comment procedures.²⁸

41.

SAFCEI and ELA-JHB submit that the NNR Act should be amended to require that notice be given to I&APs and the public (not only persons ‘directly affected’ by the granting of a nuclear) of any nuclear license, nuclear site license or nuclear vessel license application, and to require that adequate information is made available to make the opportunity for making representations meaningful. SAFCEI and ELA-JHB submit further that the NNR Act should be

²⁴ Section 21(8)(a).

²⁵ SA Constitution, section 33.

²⁶ PAJA, section 3(2)(b)(v).

²⁷ PAJA, section 4(2)(b)(iii).

²⁸ PAJA, section 4(3)(d).

amended to require written reasons to be provided to I&APs and the public for any decision approving or refusing such an application. Such provision would give effect to the foundational constitutional principles of accountability, responsiveness and openness, and is required to ensure compliance with s33 of the Constitution, the relevant provisions of PAJA, as well as the common law relating to procedurally fair administrative decision-making.

42.

(b) Applications for certificate of registration, exemption or authorisation to manufacture

The proposed amendments require a person wishing to engage in any activity not contemplated in sections 21(1), (2), (3) ^(sic) or (4) to apply in the prescribed form to the CEO for a **certificate of registration** or a **certificate of exemption** or **authorisation to manufacture**.²⁹

43.

The proposed amendments seek to give the CEO the discretionary power to direct the applicant to serve a copy of the application on every municipality affected and such other body or person as the CEO determines, and to publish a copy of the application in the *Gazette* and two newspapers circulating in the area of every such municipality. Notwithstanding this, no provision is made for I&APs or the public to make representations regarding such applications. The provisions also fail to require adequate information to be provided to enable meaningful participation by I&APs and the public, or for written reasons to be given to I&APs or the public once any such decision has been made.

44.

This effectively bars I&APs and the public from participating in decision-making processes relating to applications for certificates of registration, exemptions and authorisations to manufacture.

²⁹ Section

45.

SAFCEI and ELA-JHB submit that the NNR Act should be amended to make provision for I&APs (and the public) to be given adequate notice of any decisions to be made by the CEO or regulator, including any decisions on certificate of registration applications, certificate of exemption applications, and applications for authorisation to manufacture. I&APs and the public should also be afforded an opportunity to make informed representations in respect of such applications, and reasons for any such decisions made should also be made public. This is required to give effect to the foundational constitutional principles of accountability, responsiveness and openness, and is to ensure compliance with s33 of the Constitution, the relevant provisions of PAJA, as well as the common law relating to procedurally fair administrative decision-making.

46.

(c) Authorisation to transfer

As discussed in paragraph B(a) above, the Amendment Bill seeks to substitute the NNR Act's current prohibition against the transfer of a nuclear authorisation with a provision enabling the holder of an authorisation to transfer an authorisation, with the written approval of the CEO (following an application to the Regulator as prescribed).³⁰

47.

No provision is made for giving notice of any such application to any I&APs (or the public), no provision is made for any such I&APs (or the public) to make representations regarding any transfer authorisation application, and no provision is made for the decision-maker to make public the reasons for any decision on such an application.

48.

Given that no provision is made for notification to or representations by I&APs (or the public), or for reasons to be made public, such an application would offend against the foundational constitutional principles of accountability, responsiveness and openness, as well as s33 of the Constitution, the relevant provisions of PAJA, and the common law relating to procedurally

³⁰ Section 25.

fair administrative decision-making. Interested and affected parties (and the public) will effectively be denied any opportunity to influence such decisions.

49.

(d) Pre-Construction activities

As discussed in paragraph B(b) above, the Amendment Bill seeks to introduce a requirement that no person may perform any pre-construction activities without prior written permission of the **regulator**.³¹ This would effectively allow pre-construction activities to be undertaken preparing a site for the construction of a nuclear facility.

50.

Neither the NNR Act or the proposed Amendment Bill make provision for public participation in respect of such pre-construction applications. No provision is made for I&APs or the public to be given notice of such application, to be provided with adequate information to participate meaningfully, or to make representations to the decision-maker regarding such applications. In addition, no provision is made for I&APs to be given reasons for any decision permitting pre-construction activities to be performed, and as a consequence any I&APs whose rights or legitimate expectations are adversely affected by such a decision will not be able to exercise their right to appeal against such a decision.

51.

D. STRICT LIABILITY AND LIMITED LIABILITY

While the Amendment Bill (and the NNR Act in its current form) provides that **only a holder of a holder of a nuclear license is**, whether or not there is negligence on the part of that holder, **liable for all nuclear damage caused by or resulting from the nuclear facility during the holders period of responsibility** (i.e. strict liability),³² **this liability for nuclear damage is limited, for each accident, to the amounts determined in terms of section 29(2)**³³ (i.e. limited

³¹ Section 20(2).

³² Section 30(1).

³³ In terms of s29(2), the Minister must, on the recommendation of the board and in consultation with the Minister of Finance and by notice in the *Gazette*, determine: (a) the level of financial security to be provided by the holders of nuclear licenses in respect of each of those categories; and (b) the manner in which that financial security is to be provided, in order for the holder of a nuclear license to fulfil any liability which may be incurred in terms of section 30.

liability).³⁴

52.

The level of security to be provided by holders of nuclear licenses is set out in Regulations promulgated under the NNR Act.³⁵ In terms of these Regulations, a category 1 nuclear installation (such as the Koeberg nuclear power station) is required to provide financial security equivalent to 367 million SDRs.³⁶ According to our calculations, this equates to an amount of about R3.168 billion.³⁷ This financial security must be provided by way of an insurance policy issued by a duly registered insurance company and acceptable to the Board of the Regulator, or by way of a monetary guarantee issued by a duly registered bank and acceptable to the Board of the Regulator.³⁸

53.

In terms of s29(4), if nuclear damage occurs and compensation is claimed as a result thereof, or if the Minister is satisfied that such compensation is likely to be so claimed, the Minister may require the holder of the nuclear licence in question to give additional financial security in respect of those claims or possible claims, to an amount which the Minister, after consultation with the board, determines.

54.

The Amendment Bill goes on to propose amendments to section 33, which retains its main provisions. In terms of section 33, if the total amount of compensation against a holder of a nuclear license, or the total amount of claims for compensation against such holder plus the estimated amount of claims for compensation likely to be required to be paid, exceeds, or is likely to exceed, the amount for this that holder has given security in terms of section 29, the holder must immediately notify the board and the Minister thereof in writing. If the Minister is satisfied that the total amount of claims for compensation that is unpaid (and of such claims

³⁴ Section 30(2).

³⁵ GNR.1342 of 18 October 2019: Categorisation of the various nuclear installations in the Republic, the level of financial security to be provided by holders of nuclear installation licences in respect of each category of nuclear installation and the manner in which that financial security is to be provided.

³⁶ Ibid, regulation 4, read with regulation 3.

³⁷ Based on an IMF SDR US Dollar equivalent of 0.582520 and a R14.82 Rand – US Dollar exchange rate.

³⁸ Ibid, Regulation 5(1).

as are likely to be made thereafter) will exceed the amount of security given by the holder, the Minister **must** table in Parliament a report on the nuclear damage in question, **which recommends that Parliament appropriate funds for rendering financial assistance to the holder** to the amount by which the claims exceed or are likely to exceed the security which is available; and by notice in the *Gazette* **suspend the obligation to pay the claims in respect of that nuclear damage until Parliament has decided about the recommendation**. In terms of s33(6), the giving of additional security by a holder of a nuclear license in terms of s29(4) does not affect the application of section 33.

55.

Having regard to the level of security required in respect of a Category 1 nuclear installation (a nuclear reactor with a thermal power level greater than 100MW), the holder of a nuclear site license would therefore be liable for nuclear damage up to the sum of approximately R3.168 billion (assuming that the same level of security is required for such nuclear installations as is currently required for the Koeberg nuclear power station). In contrast, it is estimated that the total costs of the Fukushima nuclear disaster could reach US \$ 626 billion³⁹ (or on our calculations about R9.27 trillion⁴⁰). Regardless of the actual amount, it is clear that a catastrophic beyond-design nuclear incident (such as a reactor core meltdown and loss of containment) could result in nuclear damage far exceeding the R3.168 billion security currently required in respect of a Category 1 nuclear installation

56.

The mandatory requirement for the Minister to table in Parliament a report on the nuclear damage in question, which recommends that Parliament appropriate funds for rendering financial assistance to the holder to the amount by which the claims exceed or are likely to exceed the security which is available, would result in the South African taxpayer having to foot the bill for any difference between the level of security provided and the actual costs of a nuclear disaster. These costs would potentially bankrupt South Africa, with intergenerational consequences.

³⁹ <https://www.japantimes.co.jp/news/2017/04/01/national/real-cost-fukushima-disaster-will-reach-%C2%A570-trillion-triple-governments-estimate-think-tank/>

⁴⁰ Based on a R14.82 Rand – US Dollar exchange rate.

57.

SAFCEI and ELA-JHB submit that the liability of a holder of a nuclear authorisation should not be limited, and that adequate financial insurance should be provided by nuclear license holders to pay for the realistic costs of a nuclear disaster (including nuclear damage arising from a catastrophic beyond-design accident resulting from a reactor core meltdown and containment failure). If insurance companies are unwilling to underwrite such liability, or if the cost of obtaining insurance or bank guarantees is prohibitive, new nuclear power stations should not be authorised. SAFCEI and ELA-JHB are opposed to the provisions enabling Parliament to appropriate funds for rendering financial assistance to the nuclear authorisation holder to the amount by which the claims exceed or are likely to exceed the security which is available. In accordance with the polluter pays principle,⁴¹ the holder should be held liable for all such damage, and the amended NNR Act should explicitly require the holder to provide adequate security to cover any claims for compensation arising from such nuclear damage.

58.

E. DISPOSAL OF HIGH LEVEL RADIOACTIVE WASTE

It is noted proposed amendments to the NNR Act include the insertion of a definition of 'disposal', namely the emplacement of radioactive waste in a disposal facility without the intention of retrieval. The proposed amendments also include the substitution of the definition of 'closure' with a new meaning, namely the completion of all technical and administrative operations after the disposal of radioactive waste in a disposal facility.

59.

The term 'disposal facility' is not defined in the NNR Act or the Amendment Bill.

⁴¹ National Environmental Management Act, 1998, section 2(4)(p): 'The **costs of remedying pollution, environmental degradation and consequent adverse health effects** and of preventing, controlling or minimising further pollution, environmental damage or adverse health effects **must be paid for by those responsible for harming the environment**'.

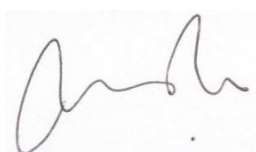
60.

One of the currently unresolvable problems faced by the nuclear industry is that there are no permanent (or final) disposal facilities in South Africa for long-lived and extremely hazardous high level radioactive waste (which can take hundreds of thousands of years to become harmless through decay⁴²). The new and revised definitions of 'disposal' and 'closure' result in this contentious issue being side-stepped. High level radioactive waste generators will be able to claim that this waste stream has been 'disposed' of when 'emplaced' in long term nuclear storage facilities, provided that they have no intention of retrieving the waste. This in turn will allow them to move towards 'closure' at the end-of-life of the nuclear facility in question, leaving the long-term and intergenerational obligation to indefinitely store high level radioactive waste, and eventually find a final disposal solution, to third parties (the cost of which will most likely be borne by current and future generations of South African taxpayers).

61.

SAFCEI and ELA-JHB submit that the proposed new definitions of 'disposal' and 'closure' should not be enacted. In accordance with the constitutional environmental right,⁴³ and the environmental management 'polluter pays' and 'lifecycle responsibility' principles,⁴⁴ the generator of high level radioactive waste should be held responsible for such waste (including the costs of indefinite storage) until such time as a final, socially-acceptable solution is found for the safe disposal of high level radioactive waste.

Signed this 20th day of September 2021



Adrian Leonard Pole

⁴² According to the US Nuclear Regulatory Commission, available online at: <https://www.nrc.gov/waste/high-level-waste.html>.

⁴³ SA Constitution, section 24.

⁴⁴ National Environmental Management Act, 1998, section 2(4)(e): 'Responsibility for the environmental health and safety consequences of a policy, programme, project, product, process, service or activity exists throughout its life cycle'