

Draft SHANTI Rules, 2026

What they mean for foreign companies and investors: opportunities, impediments and risks: A summary.

Analysis of the draft Sustainable Harnessing and Advancement of Nuclear Energy for Transforming India (SHANTI) Rules, 2026, released in draft on 14 August 2026. Page references are to the 93-page draft; rule and sub-rule numbers are as in that draft. Spellings have been Americanized for the convenience of our readers. This document is based on a quick review of the draft rules and may contain errors. The draft rules themselves appear to have some issues, which this brief has ignored for now. This note is an analysis of a published draft for discussion purposes. It is not legal advice, and the draft may change before final notification. Do not make any business or legal decisions on the basis of this information. All images in this briefing are renderings created by AI and are not necessarily accurate. Prepared by staff of Amritt Inc.

Preface

Success in India requires respect for, and an understanding of, its history: a wealthy country with a glorious past, driven to poverty by two centuries of colonial exploitation, and then subjected to a violent partition that created Pakistan. India also suffered the worst industrial disaster of all time in 1984 when a toxic methyl isocyanate gas leak from a majority foreign-owned plant killed thousands of people.

India's Atomic Energy Commission was established less than a year after the country gained independence and its first leader, Dr. Homi Bhabha, was a brilliant and visionary scientist whose near-mythic accomplishments defined the country's nuclear energy strategy, a three-stage program unique to India's situation. The Department of Atomic Energy has been under the direct charge of the Prime Minister and is not under the federal Ministry of Power.

Homi Bhabha designed the program in the 1950s around a simple constraint: India had little uranium but possesses one of the world's largest thorium resources, much of it in coastal monazite sands. The three stages are a plan to convert that thorium into usable fuel.



Stage one burns natural uranium in **pressurized heavy water reactors**. These generate electricity and, as a by-product, plutonium-239 in the spent fuel, which is then reprocessed. Stage one is essentially mature with a domestic PHWR fleet that the country continues to expand (and now opens up to private operators)

Stage two would feed that plutonium into **fast breeder reactors**, which produce more fissile material than they consume. Once enough plutonium has accumulated, thorium blankets are added to breed uranium-233. Earlier this year, the 500 MWe Prototype

Fast Breeder Reactor at Kalpakkam, Tamil Nadu finally reached first criticality (decades behind the original schedule).

Stage three will run reactors on the thorium–uranium-233 cycle itself — self-sustaining, and in principle capable of powering India for centuries without imported fuel. Stage three remains a design program rather than a deployment one.

India is not a signatory to the 1968 Nuclear Non-Proliferation Treaty and in 1974 it conducted a nuclear test, which India characterized as a peaceful nuclear explosion. Very quickly India became isolated from international civilian nuclear commerce and a group of supplier states formed the Nuclear Suppliers Group (NSG) which blocked trade with the country.

This situation was finally resolved 34 years later in 2008. India was granted a waiver by the NSG in September of that year, and the “123 Agreement” between the United States and India was signed the following month. India also agreed to phased IAEA monitoring of designated civilian power plants under “safeguards.”

Foreign nuclear cooperation, imported nuclear material and technology, and facilities associated with such cooperation generally operate within India's safeguarded civilian nuclear domain. Unsafeguarded strategic facilities are outside that international civilian cooperation framework where India still maintains the right to develop nuclear weapons and those “Strategic” facilities are not accessible to foreign companies. The Kalpakkam PFBR itself was explicitly kept **outside IAEA safeguards** under the 2006 Separation Plan, which also left the designation of future civilian facilities to India's own determination.

1. How to read this note

The draft Rules are the operating manual for India's newly opened civil nuclear sector. They supersede six existing instruments — including the Atomic Energy (Radiation Protection) Rules, 2004, the Civil Liability for Nuclear Damage Rules, 2011 and the Nuclear Liability Fund Rules, 2015 — and run to 152 rules across ten chapters, two Schedules and six Forms.

Three structural points frame everything that follows.

- **Two regulators, two instruments.** A **commercial license** is granted by a “licensing authority” in the Central Government (an officer not below Joint Secretary rank; in India a Joint Secretary is a senior career civil servant, not a political appointee; often from the elite Indian Administrative Service; although in the Department of Atomic Energy many officials are scientists and engineers who were hired right out of college and have spent their entire career in the atomic energy ecosystem), while **safety authorization** for siting, construction, commissioning, operation and decommissioning is granted separately by the Atomic Energy Regulatory Board (the AERB has issued draft SHANTI Regulations, 2026, also dated 14 August 2026, which govern the safety-authorization limb described here. A license alone does not permit construction; a design approval and safety authorization from the Board are additionally required. The SHANTI Act gives the

AERB statutory standing for the first time, replacing its former status as a body constituted by executive order.

- **The Rules do not themselves say *who* may invest in a nuclear power plant or related factory.** While the SHANTI Act and the draft rules mention an “eligible person” there is not a definition of which persons or companies qualify as eligible. On May 19, 2026 Indian Finance Minister Nirmala Sitharaman met with a team from the U.S. based Nuclear Energy Institute and the U.S. India Strategic Partnership Forum. The Ministry of Finance account on [X then tweeted](#) “Referring to recent policy initiatives aimed at encouraging global participation in India’s nuclear sector, the Union Finance Minister informed the delegation that Foreign Direct Investment (FDI) of up to 49% is now permitted in nuclear power projects. Finance Minister Sitharaman emphasized that technology collaborations and strategic partnerships can serve as critical drivers of innovation and resilience in India’s nuclear ecosystem, and encouraged the participants to actively explore opportunities for engagement and long-term collaboration in this domain.”
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- **The Central Government retains a very wide reserve power** at every stage: requisition of material, acquisition of plant, assumption of control on license cancellation, relaxation of any requirement, and final authority on interpretation. (India has a federal system of government. Electricity is a Concurrent List subject, with distribution and intra-state matters regulated by State Electricity Regulatory Commissions; atomic energy, by contrast, sits on the Union List.) But in the case of nuclear energy virtually all powers are retained by the Central Government, also called the Union Government.

Rule 2(19) — definition of “licensing authority” — page 3

“licensing authority” means such officer(s) of the Central Government, not below the rank of Joint Secretary or equivalent, to whom the Central Government delegates the power of grant of license under the Act, by notification;

Note the practical division that follows. A foreign vendor’s regulatory counterparties are both central — the licensing authority for the commercial license, and the Board for safety authorization —but important schedule risks are split across levels of government: state authorities are important for land, water and local matters, while environmental clearance for major nuclear projects is principally a Central Government process. Site choice is therefore both a commercial and a regulatory/administrative decision.

For a foreign player, the choice of Indian partner may need to include state level considerations and third-party guidance on what that entails.

2. Opportunities

2.1 A genuine commercial market, and it is not only about grid electricity

Rule 3(1) permits a license to build, own, operate and decommission a nuclear power plant or reactor for six distinct commercial purposes. The breadth here is the most commercially significant feature of the draft: grid supply is only one of six, and the others carry materially different revenue models and, in some cases, lighter obligations.

Rule 3(1)(a)-(f) — pages 4-5

(a) supply of electricity to grid;

(b) captive power generation;

(c) process heat applications, hydrogen production, or a hybrid system supplying process heat, hydrogen and electricity in proportions varying from zero to hundred per cent;

(d) isotope production for medical applications or other applications, either standalone or hybrid with electricity generation;

(e) education, training and research applications including conduct of technological works connected with development of reactor design and technology;

(f) any other peaceful applications as permitted by the Central Government.

2.2 Captive nuclear for data centers, AI and “hard-to-abate” industry

The Explanation to rule 3 spells out the captive use case in unusually specific and modern terms. For vendors of small modular and micro reactors, and for hyperscalers and semiconductor manufacturers building Indian capacity, this is an explicit recognition of these captive-use cases in Indian nuclear regulation. Process plants such as smelters of iron, steel, aluminum, copper and other metals as well as any factory that needs heat energy will benefit greatly by avoiding the efficiency losses that happen in converting steam energy to electricity and then back to heat.

Rule 3, Explanation (b) — page 5

Captive power generation means the power generated from captive generating plant which meets qualifying criteria specified by The Electricity Act, 2003 [Act No.36 of 2003] and rules and notifications issued thereunder. Nuclear power produced thereof may be used for hard to abate sectors like (such as) aluminum, cement industries and other applications such as use in data centers, high-end applications like quantum technologies, high performance computing, semiconductors fabrication, Artificial Intelligence (AI) enabled technologies, etc.

Note the consequential advantage: a captive plant sells to itself or to a defined group of consumers, so it sits **outside the grid tariff mechanism**, although the decommissioning and spent-fuel levies are still calibrated by reference to electricity rates.

2.3 Fusion is expressly inside the framework — and largely outside licensing

Deuterium–tritium fusion is brought within the definition of “reactor”, but rule 28 then exempts laboratory- and bench-scale research facilities, including fusion devices, from the licensing requirement altogether. For a fusion developer, the draft therefore creates a licensing exemption for specified laboratory- and bench-scale research, but not an unregulated environment: rule 28(3) preserves applicable security, safeguards and safety-authorization requirements.

Rule 3, Explanation (a) — page 5; and rule 28(1)–(2) — pages 26–27

Explanation (a): Reactor includes nuclear fission as well as Deuterium-Tritium reaction based fusion reactors.

Rule 28(1): For carrying out research, development, design and innovation in matters related to nuclear energy and radiation for the peaceful purposes as permitted under section 9 of the Act ... no license or safety authorization shall be required from the Central Government or the Board: Provided that such research is of such nature for which no handling of source material or fissile material or any radioactive material is needed such as theoretical design of reactor technologies, fuel design, modelling and simulation, manufacture and type test of new equipment and systems, full scale test facilities and the like ...

Rule 28(2): For setting up of laboratory scale or bench scale research facilities including nuclear fusion devices, which may require handling of small quantities of source material or fissile material or any radioactive material as notified, no license will be required from Central Government.

The carve-out is not unconditional: rule 28(3) (page 27) preserves security and safeguards obligations for source or fissile material, and requires safety authorization from the Board wherever an individual is likely to be exposed to radiation.

2.4 The technology-provider route — a licensable business in itself

A foreign vendor need not own or operate an Indian plant to participate. Rule 3(2) contemplates two distinct roles: the **original technology developer**, and a **technology provider**— a separately licensed intermediary authorized to on-supply that technology to Indian project companies. This creates a licensable technology-supply business. A foreign original technology developer may be able to monetize a design through an eligible Indian licensee or technology provider without itself taking construction or operating risk, subject to the Act, the eligibility notification and FDI policy.



Rule 3(2) — page 5

For the purpose of sub-rule (1), the eligible person may source the technology of a specific model of the plant or reactor, whether of indigenous or of foreign origin, either from — (a) the original technology developer in accordance with sub-rule (1) of rule 24 or (b) from any eligible person who has been licensed in accordance with sub-rule (2) of rule 24 to source such technology from the original technology developer, hereinafter referred to as technology provider:

Provided that the technology provider shall ensure availability of design support and all necessary permissions and supporting documents from original technology developer unless there has been a complete transfer of technology:

Provided also that the person sourcing the technology shall ensure that there is no infringement of Intellectual Property Rights.

The IP position for reactors is comparatively benign: rule 3(2) requires only non-infringement. Contrast this with fuel fabrication, where the draft requires IP to vest in the technology developer — see section 3.3 below.

2.5 A single composite license, and statutory turnaround times

India has chosen a composite license. One instrument covers build, own, operate and decommission, and it cannot be split. This reduces the number of consent events. (We interpret this rule as permitting the license holder to hire third-party contractors such as EPC companies to build out the power plant. This is in fact what the state-owned Nuclear Power Corporation of India Limited has done for decades).

Rule 3(1), first proviso — page 5; rule 32(3) — page 28

Rule 3(1) proviso: Provided that the license under this sub-rule shall be granted a single composite license authorizing the building, owning, operating, decommissioning of the nuclear power plant or reactor to which it relates and no license shall be applied for, granted, divided, or severed under this sub-rule in respect of any of those activities separately.

Rule 32(3): Unless otherwise specified by notification, the license for a facility or a plant or a mine shall be issued within a period of one hundred and eighty days and related permission within sixty days from the date of its admittance ...

2.6 In-principle approval — de-risking the pre-investment phase

Rule 5 permits an applicant to obtain a formal statement of support **before** a site or a technology has been chosen. Commercially, this can be a useful procedural feature for an entrant: it allows vendor negotiations and land assembly to proceed after a formal statement of support, but the in-principle approval is not itself a site, design, safety or investment approval.

Rule 5(1) and Explanation — page 6

... upon admittance of the application and where the site or technology has not been selected, licensing authority may grant 'in-principle approval' which is a statement of support to proceed towards applying for formal license subject to fulfilment of specific conditions ...

Explanation: Upon receipt of a valid 'in-principle approval', the applicant may proceed with negotiation with reactor technology vendors and for acquiring the land and other necessary infrastructure.

2.7 “Deemed” ancillary licenses for import, export and transport

A significant simplification: a principal license carries with it a “deemed” license for the import, export, acquisition, possession, transport and storage activities needed for the licensed facility. A foreign-sponsored project company does not need a separate trading license for its own fuel and equipment flows, though transaction-level **permissions** under rule 25 are still required.

Rule 24(3) — page 24

Any person who has been granted the license referred in sub-rule (1) of rule 3, rule 10, rule 14, rule 17 or rule 20 (hereinafter referred to as principal license) shall be deemed to have a license for the activities referred to in sub-rule (1) and such license — (a) shall be co-extensive with, and limited in scope to, the principal license ... (c) shall take effect, remain in force and expire with the principal license ...

2.8 Equipment manufacture sits largely outside licensing

At Amritt, we believe that this is one of the big immediate opportunities for foreign component and subsystems companies. Foreign companies can participate in equipment manufacturing in India, including through subsidiaries or joint ventures, subject to applicable FDI, export-control and other laws, taking advantage of India’s lower factor costs to serve Indian customers, and exporting product made or assembled in India to other regions.

For foreign OEMs contemplating Indian manufacturing — forgings, pressure vessels, steam generators, instrumentation and control (I&C) — the draft rules seem quite liberal. Domestic manufacture of prescribed equipment ordinarily needs no license, and domestically manufactured equipment is ordinarily outside safeguards. The trade-off is inspection access rather than licensing.

Rule 24(1), Explanation — page 23; rule 64, Explanation (b) — page 44

Rule 24(1) Explanation: ... license is ordinarily not intended for any person manufacturing prescribed equipment in the country for use by a licensee of any facility. Nevertheless, for ensuring quality of the manufactured systems, structures or components, Central Government and the Board shall have the powers to visit and inspect the premises where prescribed equipment are manufactured in the country.

Rule 64 Explanation (b): Domestically manufactured and acquired prescribed equipment shall ordinarily remain excluded from the application of safeguards, unless otherwise specified by the Central Government.

2.9 Liability relief for research and low-power reactors

This is the most important single provision for micro-reactor and research-reactor vendors. Where the **integrated** power level at a site falls below a threshold to be notified, the civil nuclear liability obligation may be waived under section 44 of the Act — removing the requirement to procure nuclear liability insurance, which is scarce and expensive in the Indian market. Note that the waiver is of nuclear liability only; the separate radiation-damage security under Chapter VI Part B still applies.

Rule 9(3) and Illustration — page 11

... the obligations of licensee with respect to civil liability for nuclear damage may be exempted under Section 44 of the Act for research reactors and other reactors of such low power for which the integrated power level of the reactors at the site and the exclusion zone does not exceed the value notified by Central Government ...

Provided further that nothing in this sub-rule shall be construed as absolving the licensee from maintaining sufficient financial security to cover other liabilities as per Part-B of Chapter VI of these rules;

Illustration: If integrated power level is 30 MWth, then there could be either one reactor of 30 MWth or more than one reactor within the notified exclusion zone with the total integrated power not exceeding 30 MWth.

2.10 Government-supplied services reduce required capex

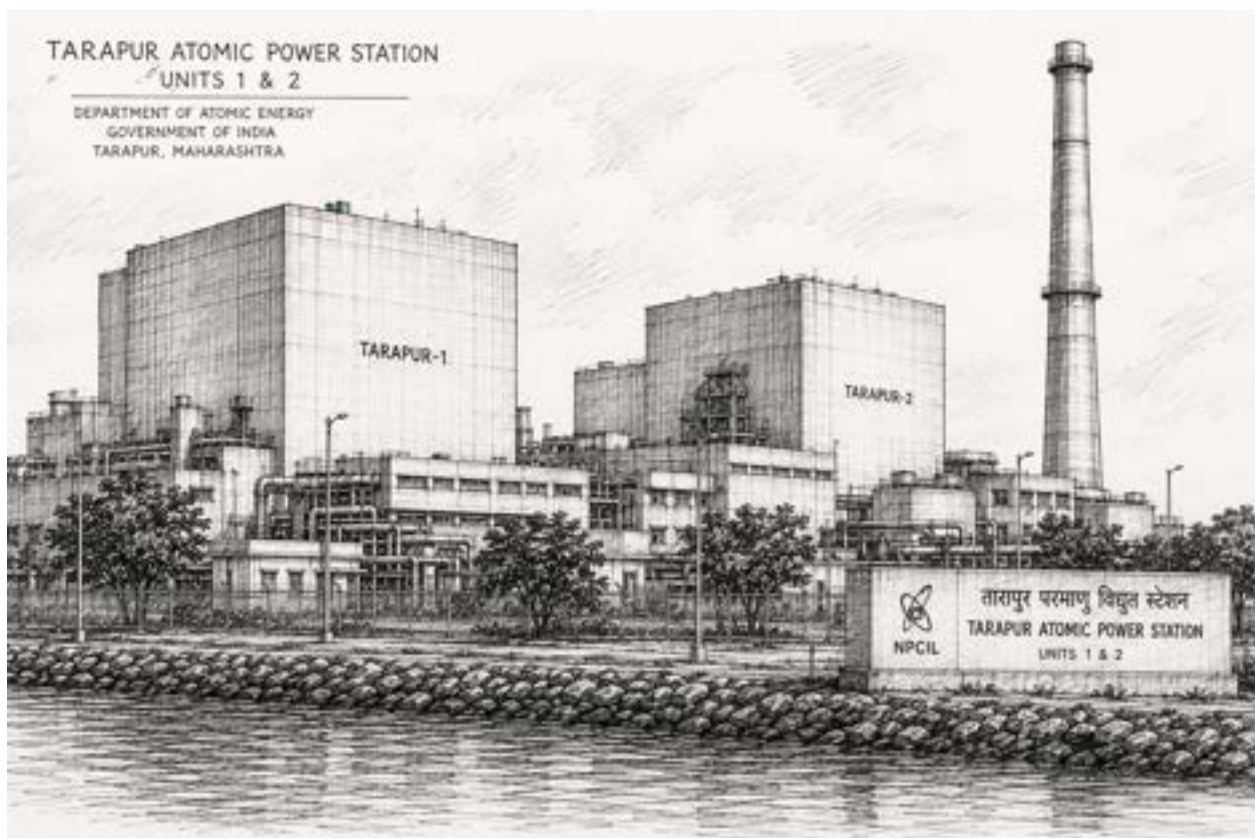
Chapter IV (rules 66–72, pages 45–48) commits the Central Government to supplying, on a chargeable basis, several capabilities a foreign entrant would otherwise have to build: calibration to internationally recognized metrology standards, dosimetry and bio-dosimetry, environmental survey laboratories and baseline data, emergency response capacity building, accreditation of QA agencies, third-party audit of manufacturing sites, and centralized long-term radioactive waste management. Rule 70 (page 47) in particular contemplates a **centralized** waste and disused-source management framework, which may reduce—but does not necessarily eliminate—the licensee’s long-tail waste-management costs and obligations.

2.11 CSC machinery is expressly operationalized

Rule 76(3) sets out the mechanics by which India would draw on the international supplementary compensation pool. For a foreign supplier assessing tail risk, the fact that the draft contemplates and operationalizes the **Convention on Supplementary Compensation** is a meaningful signal. As the rule text below makes clear, India is already a Contracting Party to the CSC, so this is the operationalization of an existing treaty commitment rather than a prospective one.

Rule 76(3) — pages 53–54

Where it appears to the Central Government that the compensation to be awarded ... exceeds, or is likely to exceed, the amount specified under sub-section (1) of section 13 of the Act ... the Central Government may ... exercise the rights of the Republic of India as a Contracting Party to the Convention on Supplementary Compensation for Nuclear Damage ... including by — (a) informing the other Contracting Parties of the nuclear incident ... (b) requesting the other Contracting Parties ... to make available the public funds ... and (c) receiving the funds so made available and disbursing them ...



3. Impediments

3.1 The “operational abroad” test — a barrier for advanced reactor vendors

A foreign design must be **both** certified or approved by its home regulator and already operational somewhere. Read literally, this excludes foreign first-of-a-kind (FOAK) reactor designs that are not yet operational abroad, including many Western SMRs and Generation IV concepts. It strongly favors foreign designs that already have an operating reference plant.

The accompanying Explanation compounds the difficulty by narrowing “country of origin” to a small and undefined set of states. We expect this is meant to disqualify countries seen as supporting causes hostile to India, or as “nuclear novices” (and therefore seen as not able to be trusted for safety and reliability).

Rule 3(3)(a) — page 5; and rule 3, Explanation to sub-rule (3) — page 6

Rule 3(3)(a): if a nuclear power plant or reactor is of a foreign design, its design should have been certified or approved in the country of origin by its regulatory body and should be operational either in country of origin or any other foreign country;

Explanation: Country of origin referred in this rule means those countries which are self-reliant in nuclear reactor design and supply chain ecosystem whose regulatory approvals are trusted globally.

Rule 7(b) — page 8

(b) if the selected design of a plant or reactor is — (i) operational in foreign country, the applicant shall provide: - a copy of license of operation issued by foreign regulator, - copy of the design certification or approval from the regulatory body of country of origin, - documentary evidence of concurrence obtained from the original technology developer;

(ii) either under construction or in operation in the country or of a new design developed indigenously, the applicant shall submit a declaration that design complies with the latest regulatory requirements of the Board at the time of application ...

3.2 Mining and isotopic separation remain closed

There is no route under this licensing provision for a foreign or private entity to hold the uranium- or thorium-mining license itself. Given the strategic sensitivity that India has long attached to the monazite sands of Kerala, which are rich in thorium, this is no surprise. The license may be granted only to Government or a nominated Government company. Isotopic separation of prescribed substances other than uranium and thorium is likewise reserved.

Rule 14(1) — page 16; rule 17, Explanation (c) — page 18

Rule 14(1): ... for mining of minerals of uranium and thorium with grade equal to or above the threshold as notified by Central Government, license may be granted ... only to Government or such Government Company or corporation owned or controlled by Government which has been nominated by the Central Government under the provisions of Atomic Minerals Concession Rules, 2016 to work upon that mine and its subsequent closure and decommissioning.

Rule 17 Explanation (c): Other prescribed substances referred in clause (c) means prescribed substances other than uranium and thorium, and isotopic separation of such prescribed substances shall remain under exclusive control of Central Government unless otherwise notified under the Act.

Downstream **processing** is more open: extraction of uranium and thorium from secondary sources — copper tailings, columbite–tantalite, red mud, sea water — is available to any eligible person under rule 17(b) (page 18). This could be an entry point for foreign metals and process-technology companies, but through a structure permitted by the Act's eligibility rules and applicable FDI policy.

3.3 The IP vesting requirement in fuel fabrication

The fuel fabrication provisions are drafted differently from and more restrictively than the reactor provisions. Where rule 3(2) requires only that IP not be infringed, rule 10(2) requires that all related IP **vest with** the technology developer. This appears to bar a fuel-fabrication technology transfer in which the Indian licensee acquires ownership of improvements or of jointly developed IP.

Rule 10(2), second proviso — page 13 (compare rule 3(2), second proviso — page 5)

Rule 10(2): Provided also that the person sourcing the technology shall ensure that all related Intellectual Property Rights vests with the technology developer.

Rule 3(2): Provided also that the person sourcing the technology shall ensure that there is no infringement of Intellectual Property Rights.



3.4 The back end for spent fuel is controlled

Spent fuel does not remain with the licensee. It is either repatriated to the country of origin where there is a contractual obligation to do so, or delivered to the Central Government. There is no private reprocessing or private long-term storage right, and heavy water that is no longer usable must be transferred periodically to the Government at the licensee's cost.

This control is principally a feature of the SHANTI Act itself, which reserves spent-fuel management—including reprocessing, recycling and high-level waste management—to the Central Government; international agreements and IAEA safeguards may add project-specific constraints.

Rule 9(4) — pages 11–12; rule 9(6) proviso — page 12

Rule 9(4): ... the spent fuel generated from nuclear power plant or reactor shall be safely stored for a cooling period of such duration to be determined by the Board before it is either — (a) repatriated to the country of origin in case the nuclear fuel assemblies or bundles, if there is a contractual obligation, or (b) delivered to Central Government in case the nuclear fuel assemblies or bundles were domestically fabricated from fuel material of foreign or indigenous origin ...

Rule 9(6) proviso: Provided that heavy water which cannot be further used due to high occupational dose considerations shall be safely stored in the plant premises and transferred at periodic intervals to the Central Government and cost of such transportation shall be borne by the licensee.

For a foreign fuel supplier this cuts both ways. The repatriation limb is available **only** where there is a contractual obligation — so a supplier who agrees to take back spent fuel confers a real commercial benefit on its Indian counterparty, and should price that accordingly.

Transboundary movement of spent fuel is separately constrained by rule 26, Explanation (b) (page 26), which requires a trade agreement calling for repatriation and, where necessary, an intergovernmental agreement.

3.5 Dispute resolution and the finality of Government interpretation

The redressal path is: review by the Atomic Energy Redressal Advisory Council (within 15 days of the order), then appeal to the Appellate Tribunal for Electricity. There is no arbitration provision and no international dispute-settlement mechanism in the draft. This matter should be discussed with attorneys familiar with how Indian courts might react in a dispute.

Rules 148–150 — page 80; rule 133(1) — page 76

Rule 148 (Interpretation): If any question arises relating to the interpretation of these rules, the same shall be referred to the Central Government for its decision.

Rule 149 (Residuary Provisions): Any matter, not expressly provided in these rules, shall be referred to the Central Government for its decision, and the decision of the Central Government thereon shall be final.

Rule 150 (Power to Relax or waive or condone): The Central Government shall have power to relax strict enforcement of any requirements imposed by these rules in the interest of safety, security and safeguards with reasons recorded in writing.

Rule 133(1): Every review application under sub-section (1) of section 48 of the Act shall be in writing and shall be accompanied by a copy of the order appealed against and shall be presented within fifteen days of the order passed.

4. Risks

4.1 Long-dated capital lock-up in financial securities

For those entities that will build and operate a nuclear power plant, three separate pools of capital are tied up for decades. The nuclear liability security must be irrevocable until all spent fuel has left the pool; pledged instruments must be over-collateralized at 1:1.33 with an immediate top-up obligation on any shortfall; and the decommissioning fund is segregated, non-withdrawable without permission, and released only against a government completion certificate.

Clearly the burden on manufacturers of components, contractors and other companies does not follow the same limitations.

Rule 77(2)-(3) — page 54; rule 111(5) and (7) — page 66

Rule 77(2): The financial security ... shall be irrevocable and shall continue till removal of all spent fuel from the spent fuel storage pool of the nuclear installation after removal thereof from the reactor core.

Rule 77(3): Shares or bonds or instruments constituting financial security shall be pledged to the Central Government and remain so pledged till decommissioning of the plant and a security margin of 1:1.33 be maintained during pledge and in the event of any shortfall in security so calculated shall be immediately made good by the operator by providing insurance or additional financial security to the extent of shortfall.

Rule 111(5): The financial security for decommissioning shall be maintained fully segregated from licensee's other assets ... and no withdrawals from it shall be made for purposes other than decommissioning and with prior permission of Central Government. Explanation: The financial security for decommissioning shall not be a part of any liquidation initiated under any extant law.

Rule 111(7): Cessation of the financial security shall be permitted only after receipt of a certificate from the Central Government, to the effect that all necessary decommissioning and site remediation has been completed to its satisfaction.

One point of relief for multi-project investors: rule 77(4) (page 54) permits a group of operators to enter a joint financial security arrangement, contributing in proportion to installed thermal capacity. Rule 77(1) Explanation (page 54) also treats co-located installations as a single installation for insurance purposes, which may reduce the aggregate insurance requirement or premium at multi-unit sites, depending on how the rule is implemented and priced by insurers.

4.2 Timeline risk sits before the clock starts

The 180-day licensing commitment in rule 32(3) runs from **admittance** of the application, not from filing. There is no outer limit on the pre-admittance phase, which includes credential verification, pre-licensing consultation and initial



scrutiny. An incomplete or inadequate application must be returned within sixty days; the draft does not expressly say that every return restarts all timing periods from zero.

Rule 4(4) — page 6; rule 30(2) — page 27; rule 32(3) proviso — page 28

Rule 4(4): The application shall be admitted by the licensing authority only on verification of the applicant's credentials, and confirmation of knowledge and understanding of the obligations as specified in sub-rule (2), and submission of all necessary documents in accordance with the provisions of rule 30.

Rule 30(2): Where the initial scrutiny reveals that the information furnished is incomplete or inadequate, the licensing authority shall return the application within a period of sixty days.

Rule 32(3) proviso: Provided that all the requirements for issuance of the license have been duly fulfilled and all information sought has been duly furnished.

License duration is also uncertain: rule 33(1)(a) (page 29) leaves it to the licensing authority, with the Explanation indicating that for a power plant it will ordinarily track the design life stated by the technology provider. Renewal beyond design life depends on written confirmation from the Board (rule 33(3), page 29).

4.3 Change-of-control and exit friction

Any material change in the information, commitments or undertakings on which a license was granted needs prior permission, and a transfer of license triggers a complete re-evaluation of the transferee. Foreign investors should treat a share sale, a change in the sponsor consortium, or a change in the technology provider as a potential consent event where it produces a material change in information, commitments or undertakings on which the license was granted, and should address regulatory conditions precedent in exit documentation.

Rule 35 — page 29; rule 36(3)-(4) — page 30

Rule 35: For any modification in the licensed facility, plant, mine or activity including change in the working conditions affecting safeguards or security, or affecting emergency planning, preparedness and response, or if there is any material change in information or commitment or undertaking based on which a license was granted, the licensee shall obtain a prior permission from the licensing authority ...

Rule 36(3): The licensing authority may permit any transfer of license under sub rule (1) only after undertaking the complete evaluation of the credentials and capabilities of the person to whom such license is being transferred.

Rule 36(4): On and from the date of transfer of license, all rights, duties, obligations, commitments, responsibilities and liabilities of the original holder of license ... shall get transferred to the person to whom the license has been transferred.

4.4 Operating cost risk: security, inspection and reporting

- **CISF deployment.** Rule 57(1)(a) (page 40) contemplates deployment of the Central Industrial Security Force — a fixed, externally determined security cost the operator does not control. In Amritt's experience such costs are rarely onerous in India today.
- **24-hour reporting.** Security events must be reported within twenty-four hours (rule 59, page 42), and accidents to the Board within twenty-four hours (rule 102(1), page 62).
- **Records retention.** Radiation worker records must be kept until the worker attains, or would have attained, seventy-five years of age, or thirty years after the exposure work ends, whichever is later (rule 41(c), page 32).

5. Conclusion

The SHANTI Act and the draft rules and regulations represent a sincere and major shift in India's approach toward nuclear energy. In any such major change, there are likely to be many fine points that are not fully defined and some unarticulated or yet undiscovered risks.

At one time all telephone systems in India were controlled by the "Posts and Telegraphs Department." And over a period of time foreign technology, foreign products and even foreign operators such as Hutchison — later acquired by Vodafone — entered India. Technology from the USA, Europe and Israel led to over a billion subscribers. The legal changes in nuclear energy are perhaps happening in a more sweeping way today.

What can Amritt do for me right now?

- We can help you formulate your comments and feedback on the draft rules released on August 14. This feedback is due to the Indian government by **September 4th India Time**.
- We can scope out the near-term and medium-term opportunity for engagement with India. If appropriate, we can identify, vet and qualify Indian partners – suppliers, customers, JV partners.
- We can guide you on an engagement strategy with the Nuclear Power Corporation of India, the Heavy Water Board, the Atomic Energy Regulatory Board and the DAE.
- We can build out a plan for you to travel to India and be your business and cross-cultural guide during and after your trip, all the way to winning and executing business.
- We can provide the links to download the rules, regulations and feedback forms.
- We can share our summary assessment of the Draft Rules.

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