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TRADE LENS

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COMPANY RESEARCH / No.05

The business economics of nuclear-component manufacturing

Doosan Enerbility SMR Orders: When Do They Become Revenue?

From TerraPower and Rolls-Royce to equipment revenue:
the conditions for turning a nuclear revival into cash

Design collaboration → manufacturing → performance → cash

Plant operation, revenue recognition and cash collection run on different clocks.

Manufacturing contracts are real.
Revenue follows performance.
Cash follows the payment terms.

Developer reactor plans are not Doosan orders. Undisclosed SMR contract values, annual revenue and margins are not imputed.

01 / RESEARCH VIEW

Manufacturing orders are real. Execution and cash come next.

TradeLens view | Start with supply scope, performance and payment terms—not the reactor start date.

Core view

Some Doosan Enerbility SMR engagements have advanced from design collaboration to manufacturing contracts—a genuine commercial milestone. TerraPower manufacturing and Rolls-Royce SMR pre-production, however, are not interchangeable firm orders. Revenue follows performance obligations; cash depends on billing, advances and collection. [\[1\]](#) [\[2\]](#) [\[13\]](#)

Question	Report answer
When does an SMR order become revenue?	When a qualifying contract exists and performance occurs. Over-time recognition can precede plant operation.
Why Doosan?	Its model extends an established nuclear-component manufacturing base into multiple developers' supply chains.
What remains distinct?	Developer deployment plans, strategic selection, component purchase orders and cash collection.
What is the test?	Manufacturing releases, acceptance, repeat orders, total cost, unbilled work, advances and cash collection.

Separate evidence of growth from evidence of returns

A first manufacturing contract demonstrates supply-chain entry. Returns then depend on recovering first-unit costs, learning through repeat production, and collecting enough cash relative to equipment and working-capital commitments. This report does not translate market size or reactor counts into company revenue or profit.

The decision rule

Read the SMR opportunity contract by contract. Identical headline order values can leave very different economics once scope, obligations and payment terms are considered.



02 / FINANCIAL BASE & SCOPE

A KRW 26 trillion backlog is not SMR revenue.

First-half 2026 company results: group earnings and Enerbility-segment orders cover different scopes.

Measure	1H26 / end-Jun 2026	Scope
Revenue	KRW 8,985.9bn	Consolidated group; +8.0% year on year
Operating profit	KRW 547.8bn	Consolidated group; +32.4% year on year
Operating margin	About 6.1%	$547.8 \div 8,985.9$; TradeLens calculation
New orders	KRW 7,122.5bn	Enerbility segment, including overseas subsidiaries
Order backlog	KRW 26,350.9bn	Enerbility segment; period-end balance

Source: Newsis, 27 Jul 2026, reporting company results. Earnings cover six months; backlog is at end-June. Figures retain the release's presentation basis. [12]

GROUP

Includes subsidiaries

ENERBILITY

Equipment, services, EPC

SMR CONTRACT

Scope, cost, collection

Separate the current earnings base from the new opportunity

Major first-half orders included seven gas turbines, Jafurah and Duqm power projects, and a gas-turbine long-term service agreement. Group earnings reflect power equipment and Doosan Bobcat together. These figures do not establish SMR profitability. [12]

Financial starting point

The existing business provides a base for SMR investment. Consolidated profit is not automatically cash available at the parent, and a large backlog is not cash insulated from schedule, cost or collection risk.



03 / TERRAPOWER: A MANUFACTURING ORDER

TerraPower: from manufacturability review to an order.

Focus on the equipment under Doosan's contract, not the value of the entire plant.



On 14 August, Doosan announced a contract for the Natrium first unit's reactor guard vessel, support structures and internal structures. It described design improvements following the 2024 review as enabling manufacturing readiness. The NRC issued the Kemmerer Unit 1 construction permit on 9 March. [\[1\]](#) [\[3\]](#) [\[4\]](#)

Item	Meaning for Doosan	Do not infer
Guard vessel and structures	Defined manufacturing responsibilities	The whole plant or exclusive supply of every nuclear-island component
Prior manufacturability work	Experience linking design to production	Identical revenue treatment for the earlier review and new order
First-unit participation	Opportunity to establish inspection and delivery records	Automatic awards or identical margins on every later unit
Construction permit	A major project milestone	An operating licence, commercial operation or completed cash recovery

Ask what Doosan performs, and when

Manufacturing, inspection, shipment and payment milestones determine the supplier's revenue and cash calendar. Plant operation can follow later. Conversely, a construction permit does not prevent order changes, production delays or re-inspection from delaying supplier returns.

TradeLens interpretation

This contract moves the opportunity beyond a purely prospective partnership. No contract value, annual revenue schedule or margin is imputed beyond the disclosed manufacturing scope.

04 / ROLLS-ROYCE SMR: SCOPE BEFORE SCALE

Strategic selection is not a whole-fleet order.

Read the May pre-production agreement alongside September localisation and component awards.

Confirmed stage

On 27 May, Rolls-Royce SMR selected Doosan Enerbility and Škoda JS as strategic suppliers. Announced work includes pre-production, design finalisation and manufacturing readiness, including the reactor pressure-vessel body. Dual sourcing and UK/Czech localisation were explicit. [2]

Announcement	Stage	Implication for Doosan
13 Apr • Wylfa	Contract progressing design and procurement for three initial units [5]	Project progress—not a three-unit blanket order for Doosan
27 May • Suppliers	Doosan and Škoda JS pre-production participation [2]	Distinguish design/process preparation from manufacturing releases
16 Sep • Supply chain	Up to £1.4bn opportunities over one year; >70% UK-content target [6]	Programme targets—not Doosan's revenue share
23 Sep • Components	ŠKODA JS design and supply of control-rod drive mechanisms [7]	Different components have different suppliers and contracts

Localisation does not imply exclusion of every overseas supplier. Nor does strategic-supplier status guarantee long-term exclusivity across components. Doosan's role must be assessed through scope, local partnerships, technical responsibility and the next manufacturing release.

Commercial gate

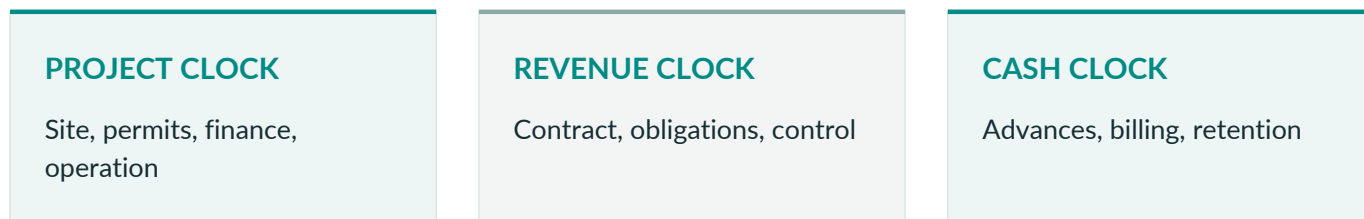
The next evidence is Doosan's actual component awards, binding terms, manufacturing releases and billing milestones—not the announced number of plants.



05 / THE THREE CLOCKS

The plant, revenue and cash run on different clocks.

These stages interact, but do not finish together. The diagram is a conceptual contract framework.



Contract stage	Revenue relationship	Cash relationship
MOU / supplier selection	Not revenue merely because announced	Check whether any advance exists
Design / engineering services	A paid contract can generate its own revenue	Acceptance and billing terms for services
Equipment manufacture	Assess over-time versus point-in-time control transfer	Advances, progress payments and inspection terms
Shipment / acceptance	Separate prior recognised revenue from final performance	Retention, warranty and final payment conditions
Plant operation	Not necessarily the supplier's revenue start date	Matters if payment or guarantees depend on operation

General accounting principles follow IFRS 15: performance obligations, transfer of control and progress measurement. This is not a determination for a particular SMR contract. [\[13\]](#) [\[14\]](#)

Avoid both “only at plant completion” and “on signing”

Over-time recognition requires qualifying criteria. For example, no alternative use and an enforceable right to payment for performance to date are joint conditions under paragraph 35(c). Other qualifying criteria also exist; if none is met, revenue is recognised when control transfers. [\[14\]](#)

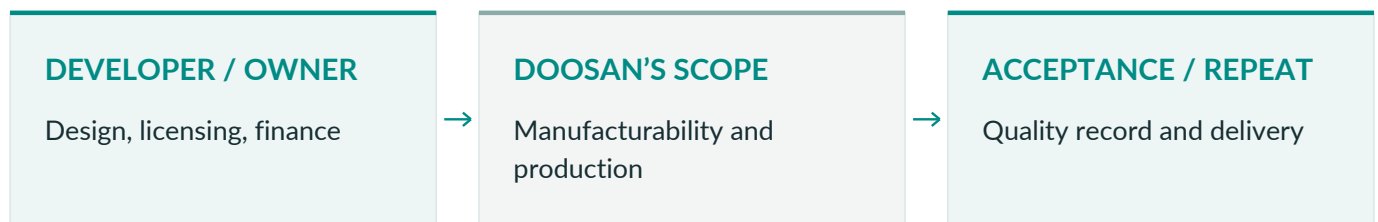
Direct answer to the title

SMR orders become revenue as the relevant contractual performance occurs. There is no single company-wide start year: service, manufacturing and acceptance terms determine timing.

06 / MANUFACTURING VALUE CAPTURE

Doosan manufactures the hardware; it does not sell the reactor design.

Separate positions in the value chain to identify who captures the economic benefit.



In December 2024, Doosan reported having supplied 34 reactors and 124 steam generators. That is evidence of an established manufacturing record—not a 2026 cumulative total or an SMR delivery count. TerraPower and Rolls-Royce SMR illustrate its extension into new-design supply chains. [\[10\]](#) [\[1\]](#) [\[2\]](#)

Capability	Condition for capturing value	Constraint
Design-to-manufacture integration	Reduce rework and meet customer acceptance requirements	First-unit design changes and validation cost
Large-component experience	Deliver tolerances, inspection, traceability and schedule	Large-reactor experience is not automatic qualification for every design
Multiple developer relationships	Diversify exposure to one design or owner delay	Design-specific equipment, people and qualification
Repeat manufacture	Standardisation, process learning and asset use	Gaps between orders and customer price pressure

TradeLens view

The advantage lies in repeatable, qualified manufacturing rather than the SMR label. Executing the first unit can widen future opportunities, but repeat orders at adequate prices are needed to monetise that experience.



07 / REVENUE & CASH LAB

Revenue can reach 50 while cash receipts are only 30.

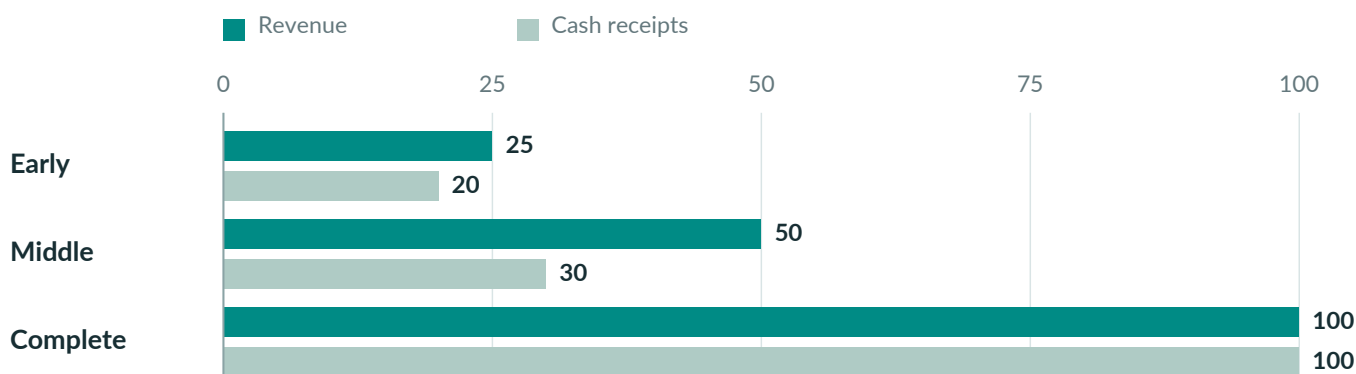
Illustrative model A | Not an estimate of Doosan's contract value, payment schedule or accounting treatment.

Model assumptions

Contract price 100; estimated total cost 80. Assume qualifying over-time recognition and a cost-to-cost measure that faithfully depicts performance. All incurred cost is paid and all billing collected immediately. No advances, retention, tax, interest or capital expenditure.

Cumulative revenue and cash receipts

Contract price=100 · illustrative



Cumulative	Early	Midpoint	Complete
Incurred and paid cost	20	40	80
Progress	25%	50%	100%
Recognised revenue	25	50	100
Billed and collected	20	30	100
Unbilled difference	5	20	0
Receipts less paid cost	0	-10	20

Revenue = $100 \times \text{incurred cost} \div 80$. Unbilled difference = revenue less billings. Receipts less paid cost is not reported company operating or free cash flow.

What this changes

Ask who finances production, not only how fast revenue grows. Even a contract earning 20 over its life can require working capital and financing when progress payments lag.



08 / ACTUAL CASH-CONVERSION EVIDENCE

Existing disclosures already show the profit–cash gap.

A first-quarter 2026 separate-statement case—not first-half or standalone SMR cash flow.

1Q26 · Separate statements	KRW bn	Interpretation
Net loss	–25.759	Accrual-accounting starting point
Adjustments	+168.693	Non-cash and other disclosed adjustments
Operating asset/liability movements	–720.353	Collection, payment timing and working capital
Cash generated from operations	–577.419	Sum of the three preceding items
Net interest, dividends and tax cash	–50.923	1.572 – 46.483 + 0.909 – 6.921
Operating cash flow	–628.342	Reported separate-statement operating cash flow

Source: 1Q26 filing, separate cash-flow statement and notes. KRW million converted to billion. Consolidated operating cash flow was –565.522bn; do not add it to the separate figure. [11]

This tests the business model—not SMR underperformance

One quarter's outflow does not establish annual liquidity distress or SMR losses. It does show why upfront production costs, unbilled work, supplier payments and customer advances matter in scaling equipment manufacturing. Better first-half earnings do not by themselves prove that the cash-timing gap has closed.

Next reporting check	Interpretation
Unbilled work, receivables and advances	Do billing and collection catch up with progress?
Annual / trailing-12-month operating cash flow	Do outflows persist beyond seasonal timing?
Parent debt, interest, cash and capital spending	Can new capacity and existing projects be funded together?

Cash-conversion test

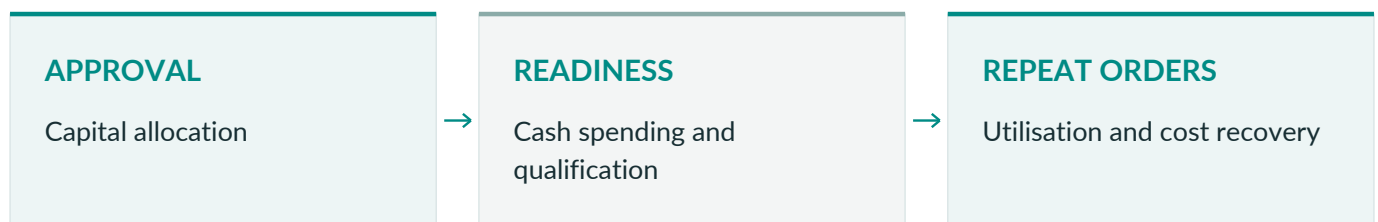
The quality of order growth is tested after revenue recognition, at billing and collection. Keep consolidated profit distinct from the parent's investable cash.

09 / CAPITAL ALLOCATION

Factory readiness must match the pace of orders.

Distinguish approval, spending, readiness, customer qualification and repeat production.

The company's board record lists approval of investment in a new SMR manufacturing facility on 17 December 2025. That is a capital-allocation decision to expand manufacturing capacity, not proof of completion, utilisation, secured orders or an investment return. [9]



Commitment	Why it may precede revenue	Economic test
Factory and equipment	Buildings, machines and testing precede production	Spending, readiness, commissioning and maintenance needs
Specialists and process development	Design-specific qualification comes first	Labour hours, rework, qualification and acceptance
Work in progress and long-lead inputs	Materials and subcontracting may precede billing	Advances, unbilled work, inventories and payment timing
Guarantees and warranties	Some obligations survive acceptance	Retention, provisions, releases and final payments

More orders need not mean a higher return on capital

Exposure to several reactor designs can reduce dependence on one customer's schedule. It can also duplicate equipment, testing and specialist costs. Assess process compatibility and gaps between orders—not just nominal capacity.

Capital-allocation test

The test is phased spending against contracted work at recoverable prices. Capacity across different modules and reactor designs should not be added as if fully interchangeable.



10 / MARGIN & COST-TO-COMPLETE LAB

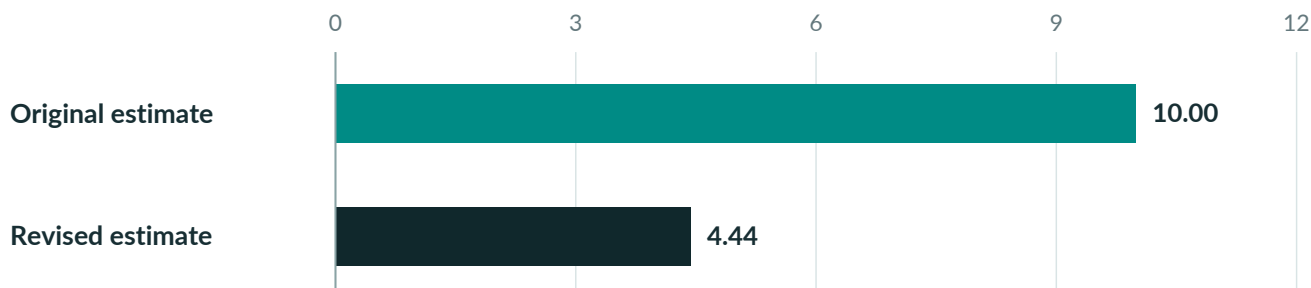
A cost increase of 10 can halve a lifetime profit of 20.

Illustrative model B | Keep model A's price at 100; change estimated total cost from 80 to 90.

At incurred cost of 40	Original estimate	Revised cost estimate
Contract price	100	100
Estimated total cost	80	90
Cost-to-cost progress	50.0%	44.4%
Cumulative revenue	50.00	44.44
Cumulative profit	10.00	4.44
Total profit at completion	20.00	10.00

Cumulative profit at the same incurred cost of 40

Illustrative



Revised revenue = $100 \times 40 \div 90 = 44.44$; cumulative profit = $44.44 - 40 = 4.44$. The cumulative revenue/profit adjustment is -5.56 . These are not actual company margins or a loss forecast.

Do not award repeat-production margins to the first unit

Supplier-borne design changes, inspection, materials, subcontracting and rework can erode profit independently of revenue growth. Cost recovery, approved change orders, delay damages and warranty scope matter. Learning on later units is realised only with actual orders and appropriate prices.

TradeLens view

The manufacturing opportunity is real, but profitability can be more sensitive to cost-to-complete than to the headline contract price. Higher progress is not synonymous with a better margin.

11 / PIPELINE, REPEAT ORDERS & LOCALISATION

Eight developer units are not eight Doosan orders.

Repeat awards create the next opportunity, but the bridge from developer plans cannot be skipped.

The January TerraPower–Meta agreement covers development of up to eight Natrium plants. It distinguishes development support for the first two from energy rights for up to six more, targeting initial delivery as early as 2032. This is a developer programme separate from the first Kemmerer equipment contract. [8]

To convert demand into an award	Next evidence needed for Doosan
Site, permits and funding must align	An executable schedule for a specific project
Doosan's equipment scope must be assigned	A manufacturing contract, change order or binding purchase scope
Price and obligations must be allocated	Cost pass-through, localisation, testing, warranty and delay terms
Production and payment windows must align	Long-lead releases, capacity allocation, advances and milestone payments

A larger fleet need not preserve the same supplier share

Rolls-Royce SMR pursues dual sourcing and UK/Czech localisation. Local partners could expand Doosan's accessible scope or move part of manufacturing value locally. A target above 70% UK content does not make the remaining share Doosan's revenue. [2] [6]

Critical variable

The crucial variable is not the pipeline unit count but the cadence, price and payment terms of repeatable contracts for a defined equipment scope.

12 / SCENARIOS & FALSIFICATION

Commercial progress is real; scale-up has several paths.

These are conditional business scenarios, not probabilities or share-price forecasts.

Scenario	Conditions to observe	Business implication
Base: selective execution	TerraPower production advances; Rolls-Royce preparation progresses; core business holds	SMR revenue opportunities expand, with cost, investment and collection still decisive
Expansion: repeat awards	Defined follow-on scopes, standardisation and adequate progress funding	Learning and asset use may convert into cash and cost recovery
Delay: readiness costs lead	Design, licensing or financing delays; order gaps; upfront staffing and equipment	Cost, working capital and debt can rise before revenue
Pricing/localisation pressure	Lower repeat-order prices or reduced supplier scope	A larger market can still leave limited incremental supplier profit

Evidence that strengthens the view

Look for first-unit manufacturing and acceptance milestones, repeat orders for the same scope, stable cost-to-complete, and billing that converts to cash. These provide more direct supplier evidence than a single plant-start announcement.

Evidence that weakens the view

Persistent gaps in follow-on awards, repeated rework or cost revisions, localisation-driven scope loss, and rising unbilled work alongside parent financing needs would require reassessing capital recovery. These are monitoring conditions, not claims that such failures have occurred.

Interpretive boundary

Backlog growth alone is insufficient. Execution, cost control and cash conversion must improve together.

13 / OUTLOOK & MONITORING

SMR value is realised in cash retained, not just orders won.

Link the next checkpoints across contracts, manufacturing and finance.

Checkpoint	Disclosure to watch	Interpretation
TerraPower execution	Manufacturing releases, inspection and delivery	Are the supplier and plant schedules aligned?
Rolls-Royce conversion	Doosan-specific follow-on equipment awards	Does selection convert into binding manufacturing scope?
Capacity and capital	Equipment spending, readiness and testing capability	Does investment match contracted demand?
Cost and profitability	Cost-to-complete, changes, warranty and rework	Does repetition improve unit economics?
Cash and finance	Advances, unbilled work, receivables, parent debt and operating cash	When is performed work collected, and who funds it?

Four answers

01 What changes?

Some design relationships convert to equipment orders.

02 Why does it matter?

Supplier revenue can arise before plant operation.

03 Who captures value?

Manufacturers that deliver quality and schedule within a priced scope and collect payment.

04 What confirms it?

Repeat awards, cost-to-complete, billing, cash and capital recovery.

Final TradeLens view

Doosan's SMR business has made tangible progress into manufacturing contracts; it is no longer solely a distant prospect. Nor do developer plans or the entire group backlog establish SMR earnings. Value rests in repeat execution of defined contracts and recovery of production, working-capital and equipment commitments.

Analysis date: 3 October 2026. The assessment concerns business economics, not buy/sell recommendations, trading timing, target/fair share prices or personalised investment advice.



14 / SOURCE REGISTER

Connect each claim to the original source

Select a teal citation, source title or “Open source” to open the underlying publication.

01. Doosan Enerbility Contract to manufacture TerraPower SMR equipment 14 Aug 2026 · Company release via Publicnow · Supply scope; 2024 review	Open source
02. Rolls-Royce SMR Strategic suppliers for nuclear-island components 27 May 2026 · Company release · Pre-production; design; dual sourcing	Open source
03. U.S. NRC Construction permit CPAR-1 for Kemmerer 9 Mar 2026 · Regulator · Issuance of the construction permit	Open source
04. U.S. DOE Natrium construction permit and subsequent steps 9 Mar 2026 · Government release · Technology; licensing; demonstration	Open source
05. Rolls-Royce SMR Contract for the initial three-unit Wylfa programme 13 Apr 2026 · Company release · Site-specific design and procurement	Open source
06. Rolls-Royce SMR UK supplier programme and localisation target 16 Sep 2026 · Company plan · Up to £1.4bn opportunity; >70% UK content	Open source
07. Rolls-Royce SMR ŠKODA JS control-rod drive mechanism contract 23 Sep 2026 · Company release · Component-level allocation of scope	Open source
08. TerraPower Meta agreement to develop up to eight Natrium plants 9 Jan 2026 · Developer plan · First two units; rights for six more; 2032 earliest	Open source
09. Doosan Enerbility Board resolutions Resolution of 17 Dec 2025 · Company record · New SMR factory approval	Open source
10. Doosan Enerbility Track record in nuclear-component manufacturing 15 Dec 2024 · Company release · 34 reactors and 124 steam generators then	Open source
11. Doosan Enerbility First-quarter 2026 filing 14 May 2026 · KRX filing · Separate cash flows; revenue and cash-flow notes	Open source
12. Newsis First-half earnings and Enerbility order backlog 27 Jul 2026 · Reporting of company results · Group earnings; segment orders	Open source
13. IFRS Foundation IFRS 15 revenue-recognition overview Current standard overview · Performance obligations; control; progress	Open source
14. IFRS Interpretations Committee Over-time revenue and right to payment Mar 2018 · Agenda decisions · General principles in IFRS 15.35(c) and 37	Open source

Scope: contracts and plans follow the named companies; financials retain their stated dates and entity scope. Publicnow carries a company release; Newsis reports company results. IFRS materials explain general accounting principles.

Methodology, disclaimer and use of this report

Distinguish facts, company plans, TradeLens judgments and illustrative calculations.

Item	Basis
Dates and sources	Analysis date: 3 Oct 2026. Announcements retain their dates; earnings cover 1H26; cash-flow evidence covers 1Q26 on a separate-company basis.
Entity and business scope	Enerbility-segment orders differ from consolidated earnings. Group and separate-company figures are not added; neither is standalone SMR performance.
Contracts versus plans	TerraPower manufacturing, Rolls-Royce pre-production, developer reactor plans and localisation targets represent distinct stages.
Model A · page 8	Price 100, cost 80 and cumulative billing of 20/30/100 are assumptions. Over-time and cost-to-cost criteria are met; billing is collected and costs paid immediately.
Model B · page 11	At cost incurred of 40, total estimated cost rises from 80 to 90. This is sensitivity analysis, not a real SMR price, margin, cost or loss forecast.
Units and exclusions	KRW bn means one billion won. Calculations precede rounding. Model cash is not reported operating or free cash flow; taxes, interest and capital spending are excluded.

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