



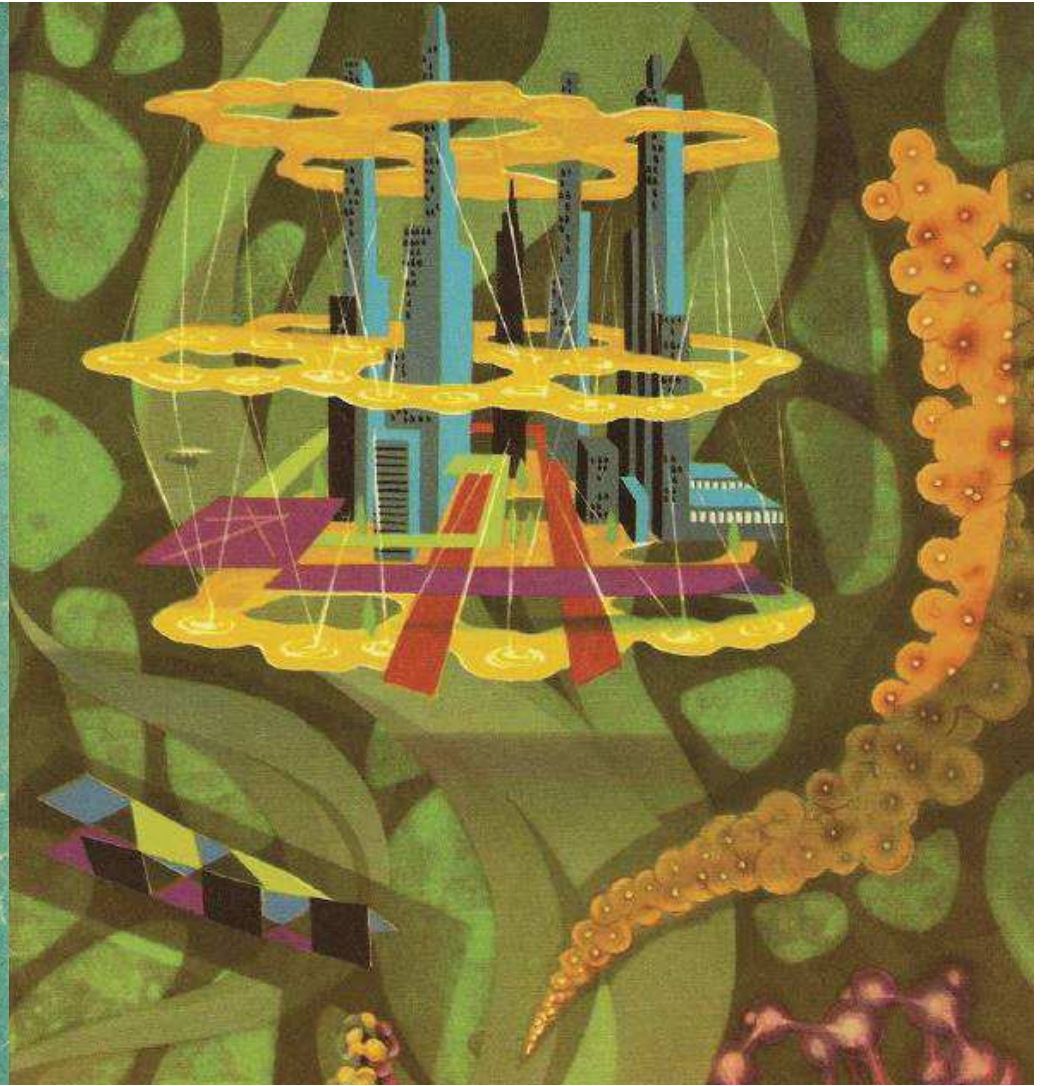
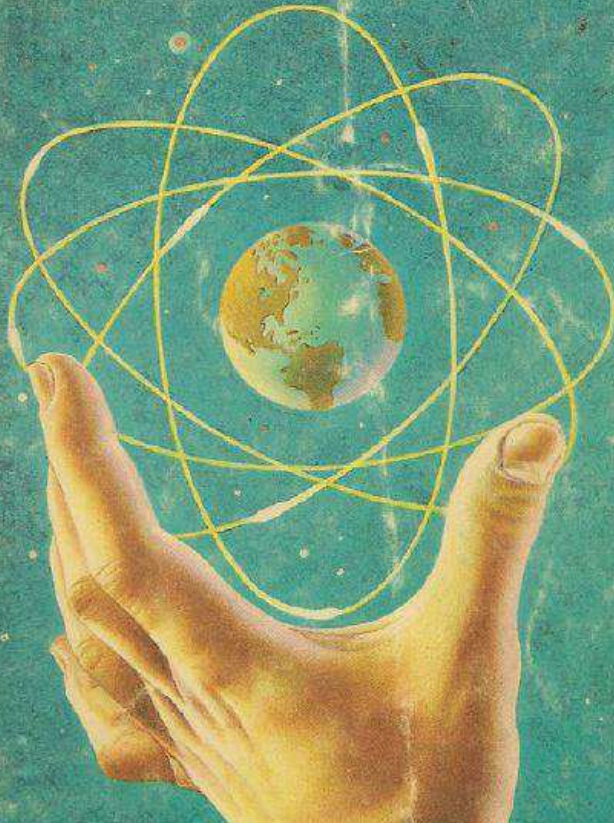




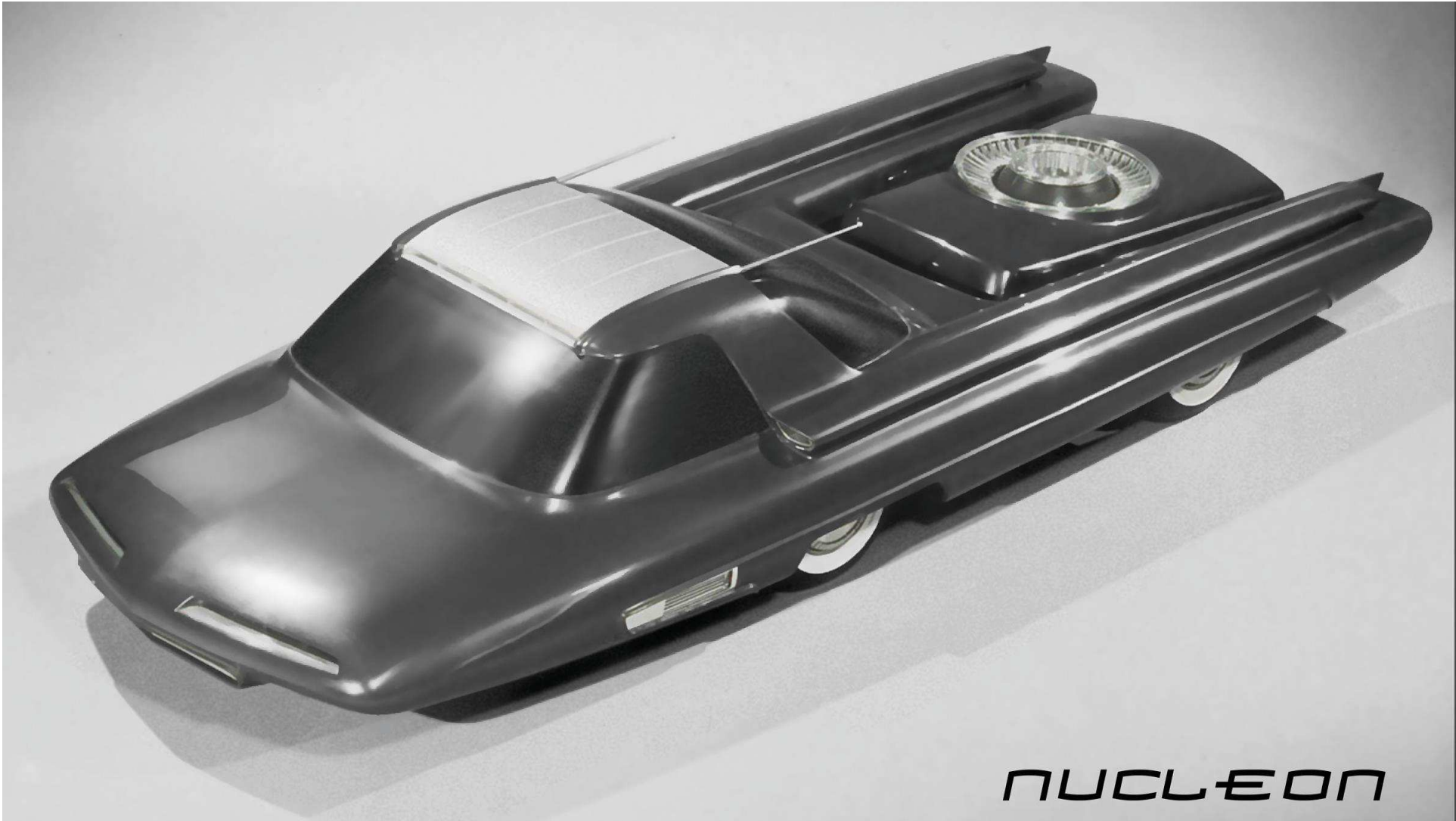


Walt Disney
OUR FRIEND THE ATOM

A Tomorrowland Adventure

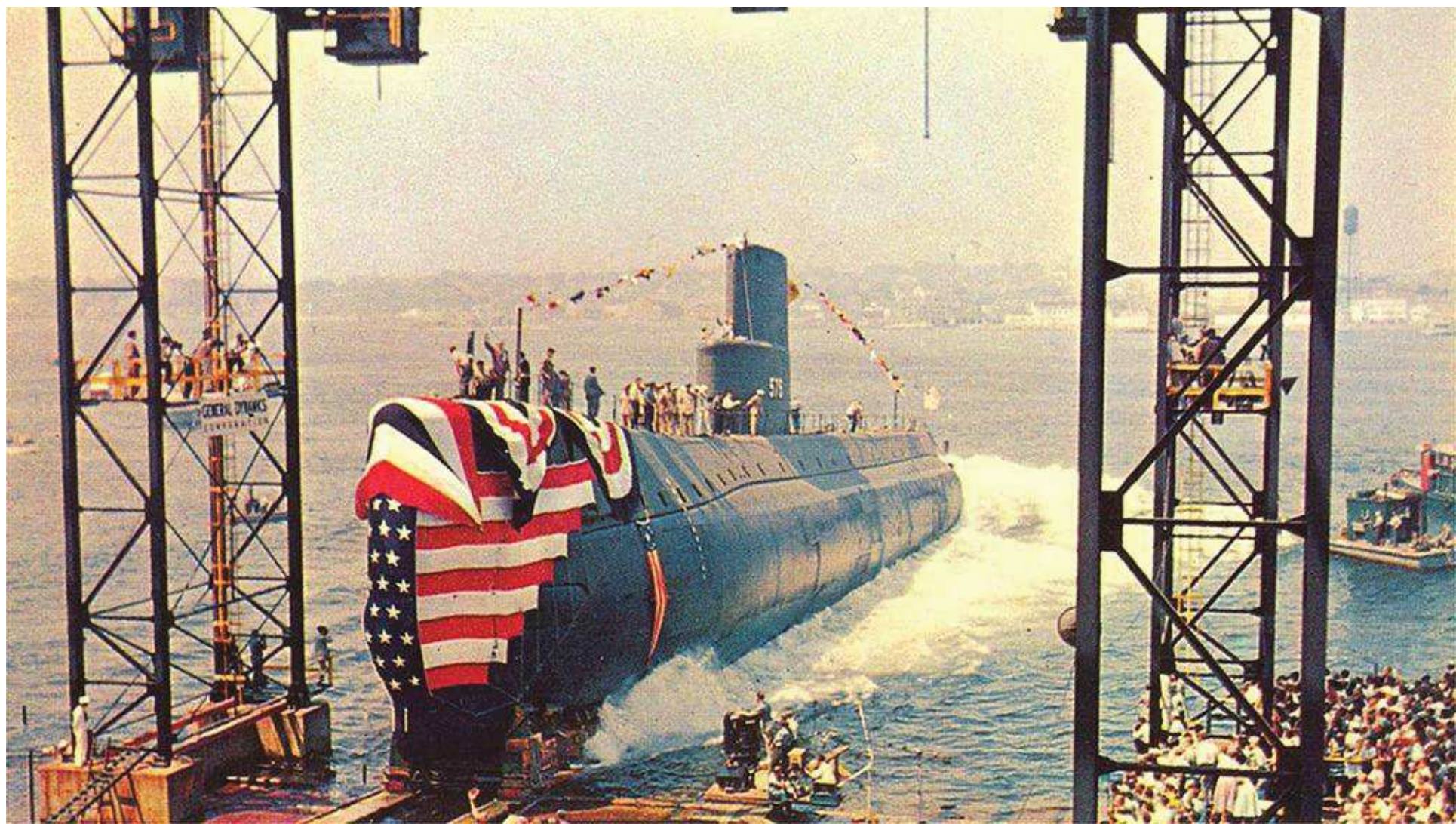


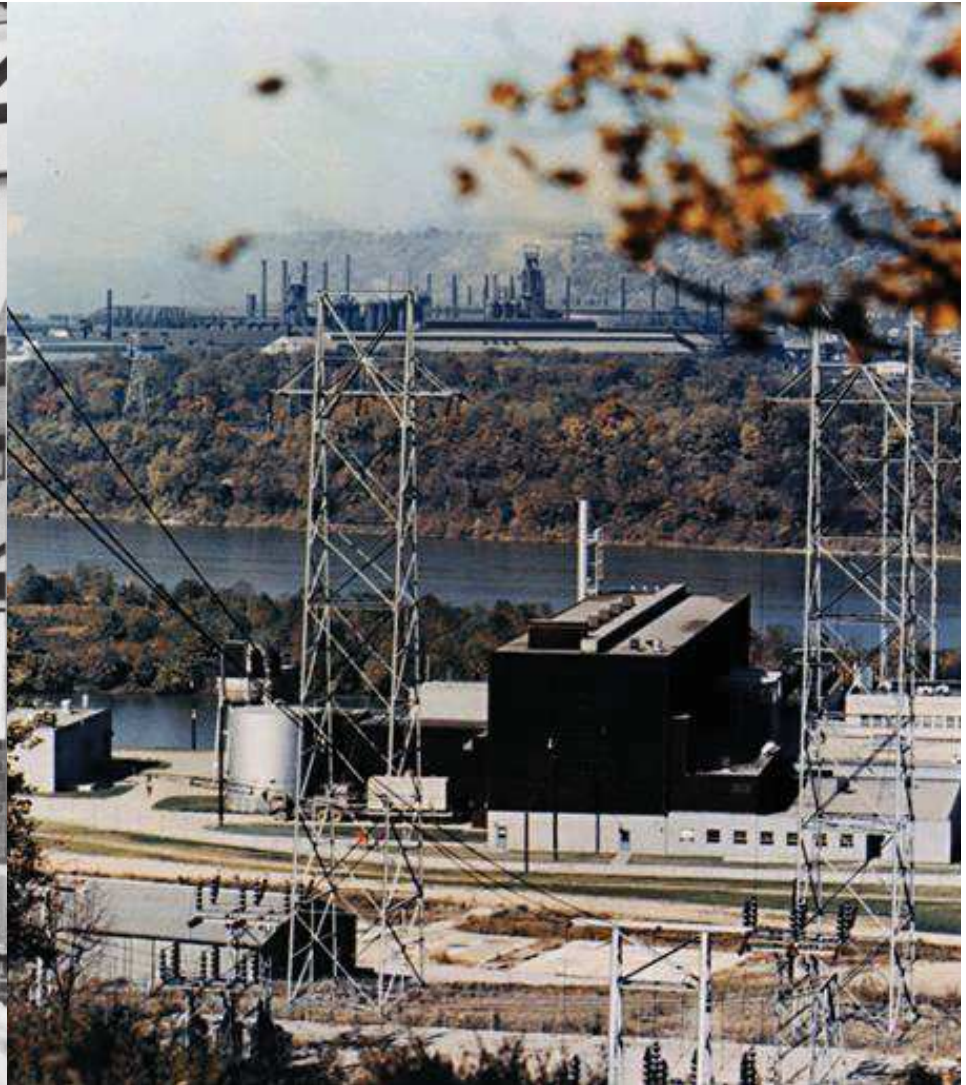
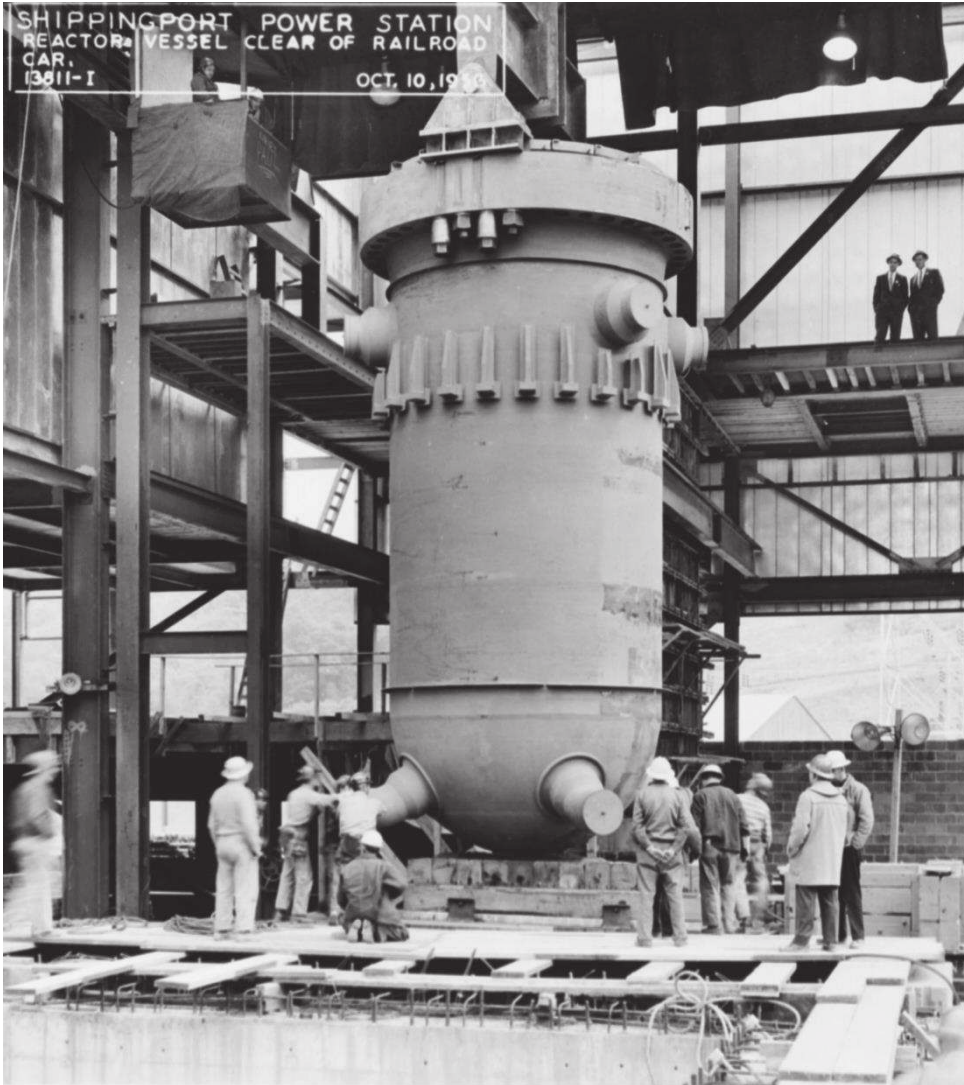




NUCLEON







An aerial photograph of a nuclear power plant, likely the Three Mile Island plant, showing four large cooling towers and various industrial buildings. The year "1979" is overlaid in large, white, bold text in the center of the image.

1979

根本的な課題を解決するための
最善策とは？

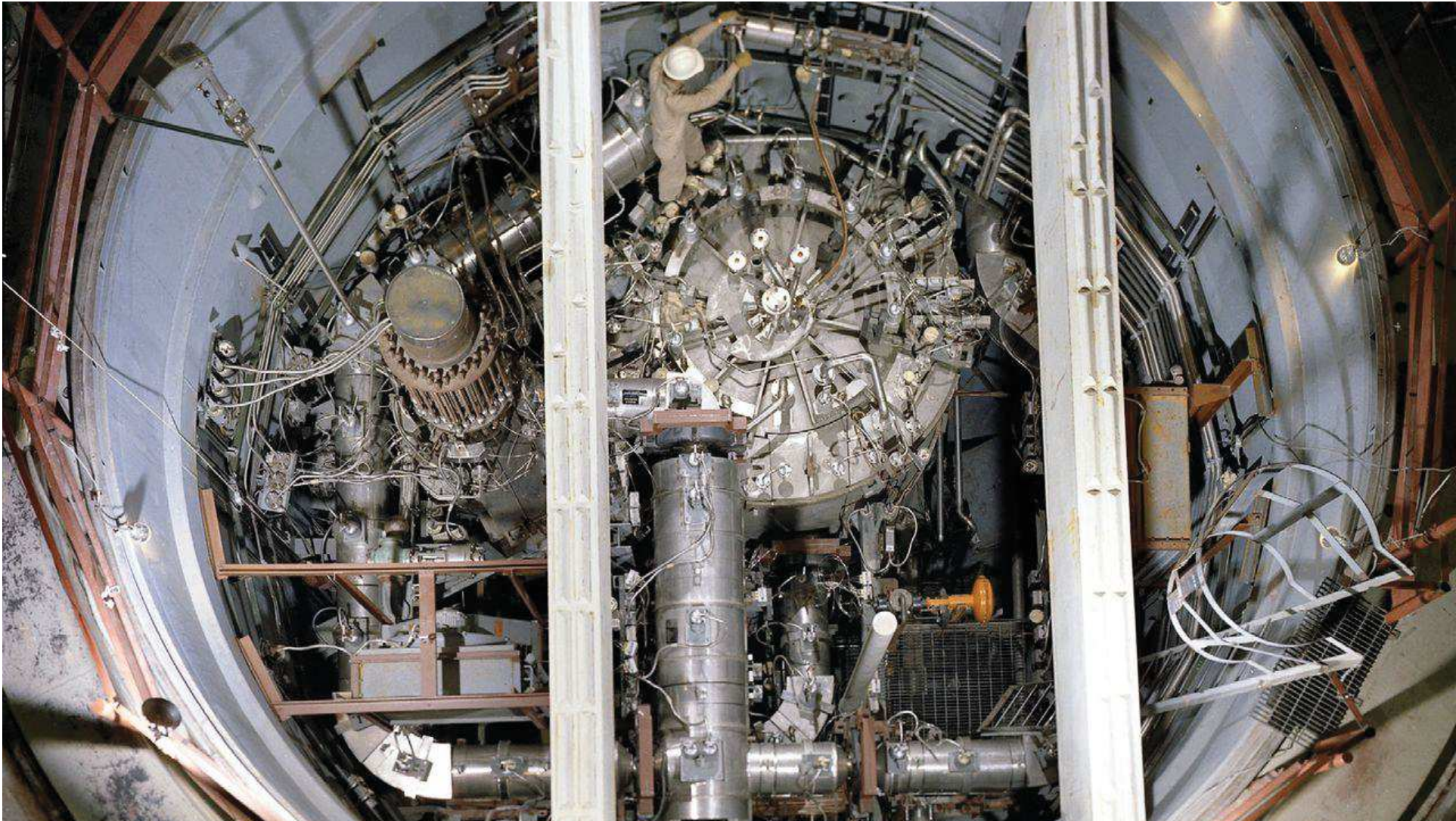


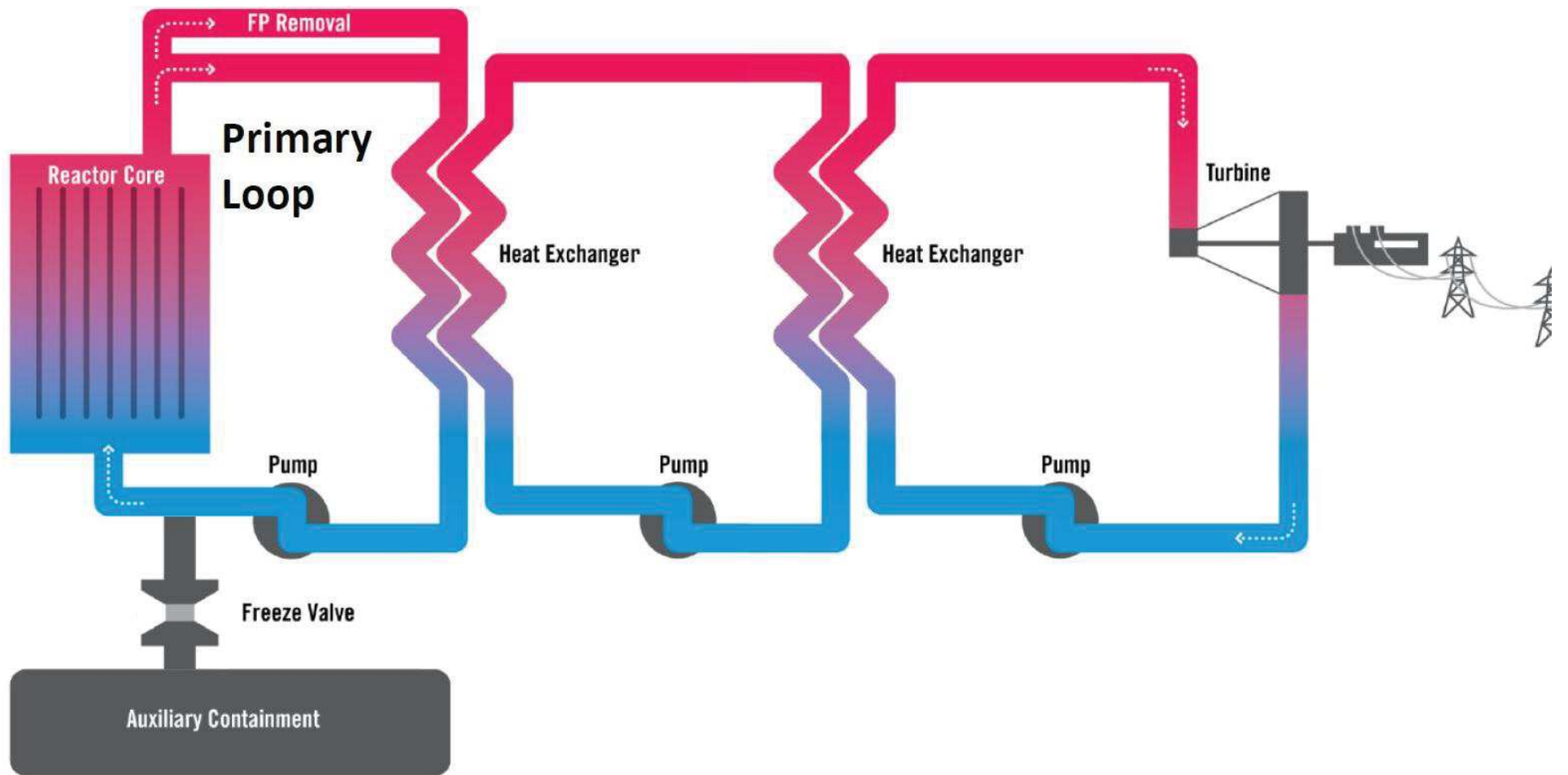
	SCWR 超臨界圧軽水 冷却炉	VHTR 超高温原子炉	MSR 溶融塩炉	SFR ナトリウム冷却 高速炉	LFR 鉛冷却高速炉	GFR ガス冷却 高速炉
高燃焼度						
低圧						
熱中性子スペ クトル						



オークリッジ国立研究所における
MSREの実演 (1965-1969)







MSRE

TAP

減速材

▶ 黒鉛

▶ 水素化ジルコニウム

溶融塩

▶ $\text{LiF-BeF}_2\text{-UF}_4$

▶ LiF-UF_4

燃料濃縮度

▶ 33%-93%

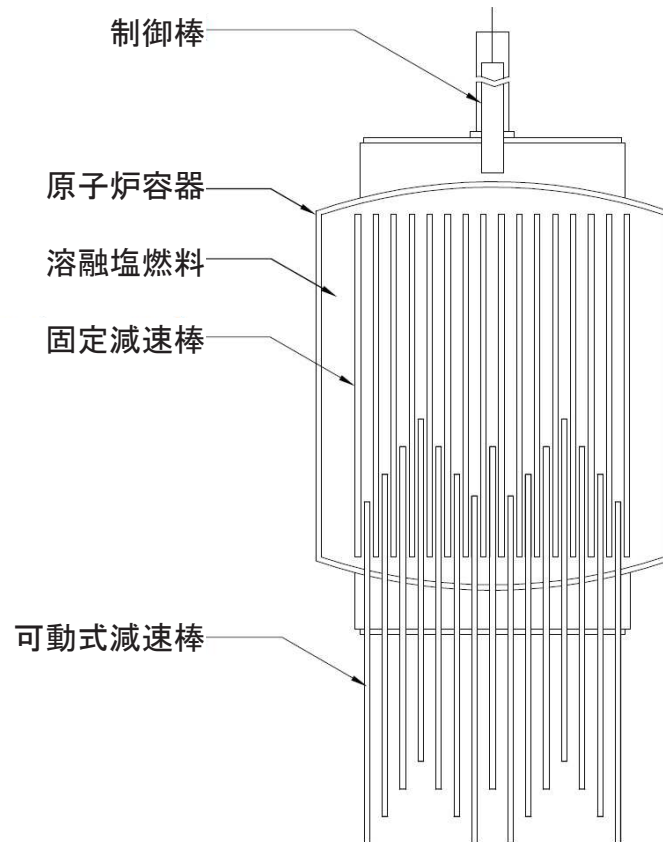
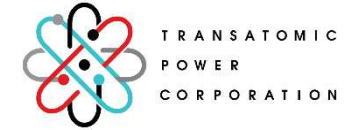
▶ 5% LEU (低濃縮ウラン)

出力密度(MWth/m^3)

▶ 4

▶ >65

特徴 – 何が違うのか



- 減速材: SiCクラッドのZrH棒を用いる
- 燃料: 濃縮度5%のLEU(低濃縮ウラン)をLiF-UF₄溶融塩に溶解させる。
- スペクトル: 燃料効率を高めるため、減速度を調整し運用期間中のスペクトルをシフトする。

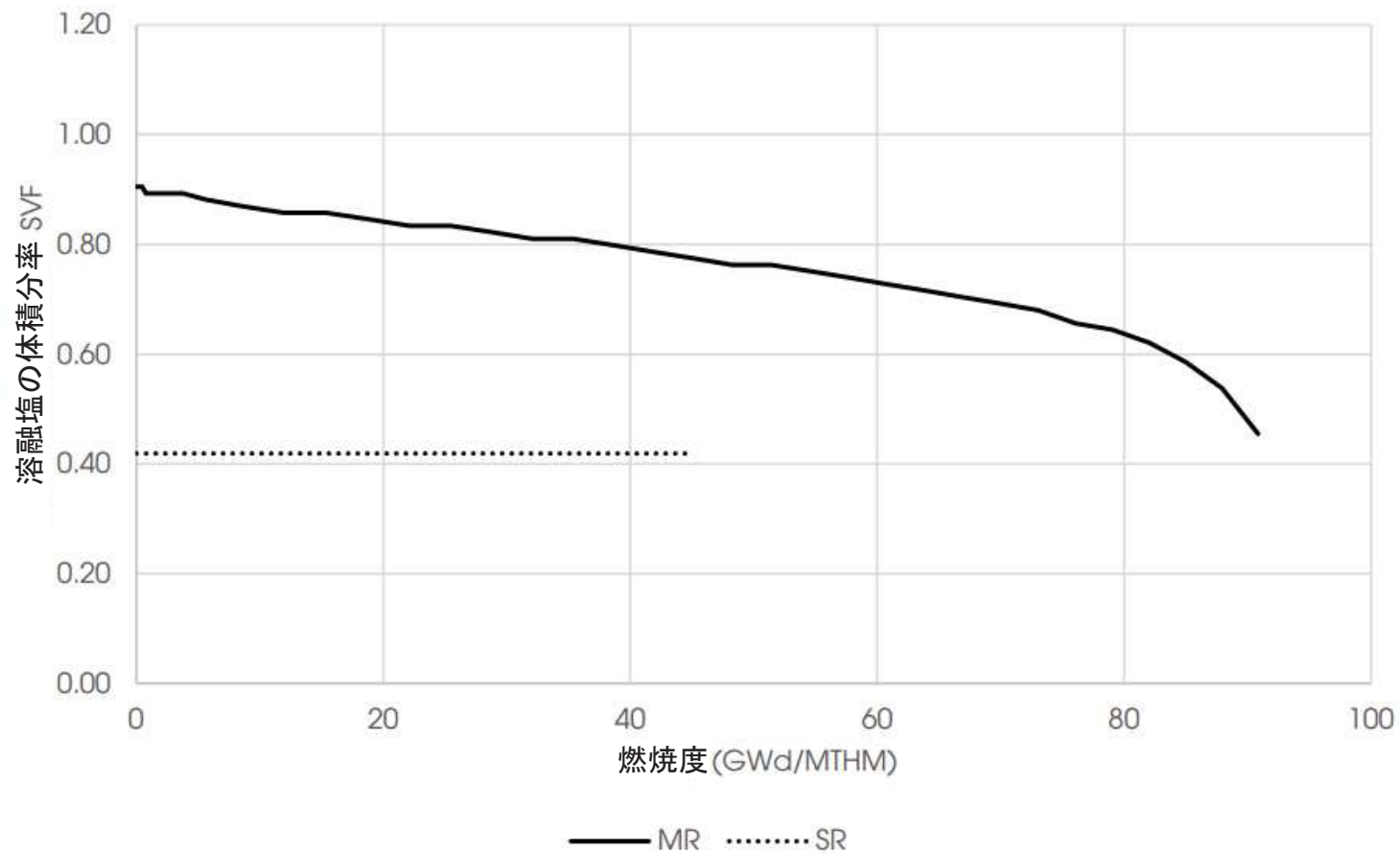
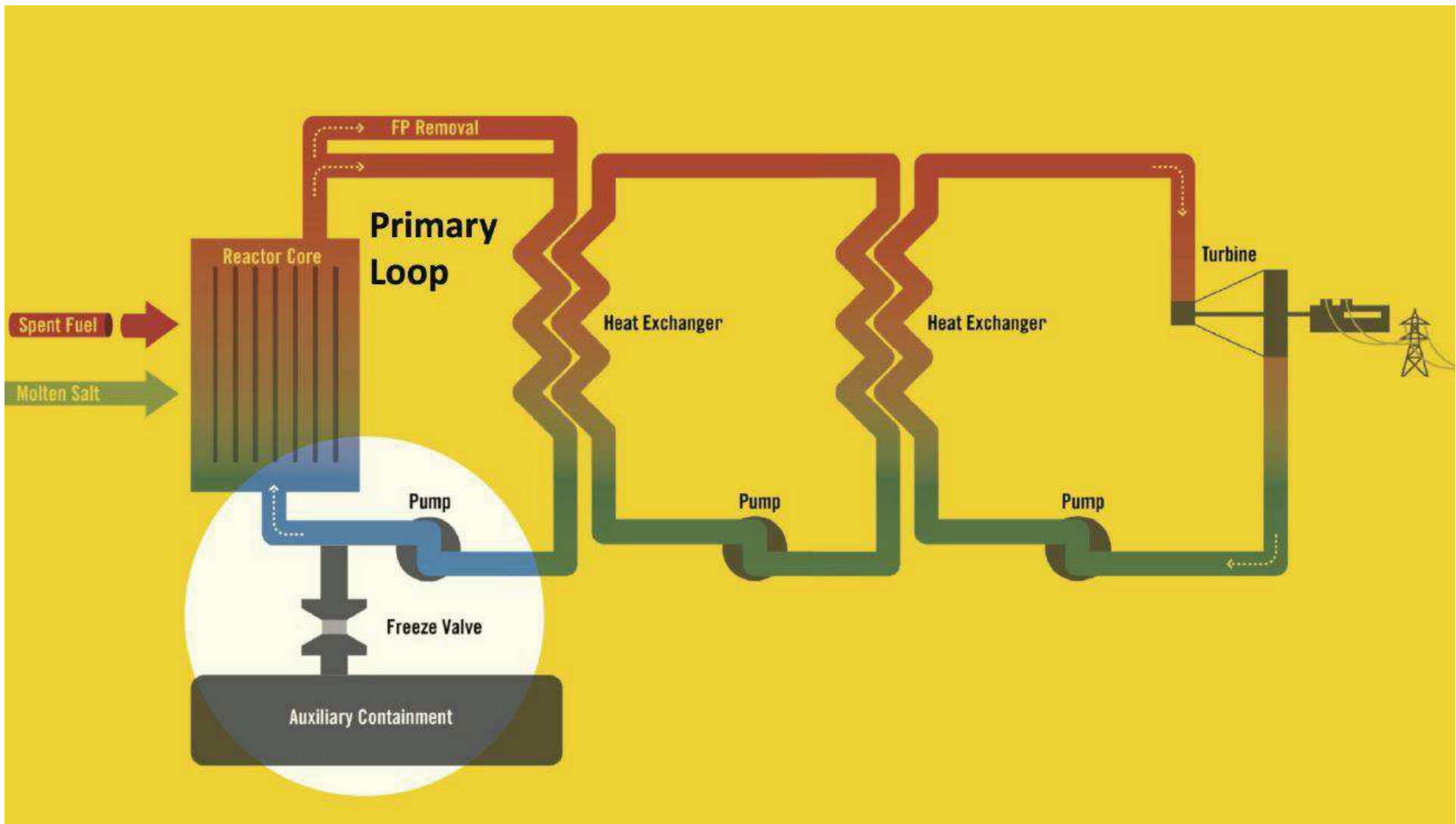



図6 – TAP原子炉の初期装荷における5%濃縮燃料の燃焼度の関数としてのSVF変化。
 凡例は2つの減速機構を表す：固定棒(SR)および可動式棒(MR)。



A photograph showing two people from behind, looking at a whiteboard. The person on the left is a woman with glasses and a dark top. The person on the right is a man with long hair and a light-colored shirt. The whiteboard has a diagram with various lines and boxes. The text is overlaid on the right side of the image.

さて、次は何をすれば
良いのでしょうか？

Delaware

PAGE 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF INCORPORATION OF "TRANSATOMIC POWER CORPORATION", FILED IN THIS OFFICE ON THE TWENTY-SEVENTH DAY OF APRIL, A.D. 2011, AT 12:23 O'CLOCK P.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.



Dr. Leslie Dewan
Chief Executive Officer

- PhD MIT Nuclear Engineering
- MIT Presidential Fellow
- TIME 30 Under 30
- WEF Young Global Leader



Mark Massie
Chief Technology Officer

- MS MIT Nuclear Engineering
- DOE Nuclear Engineering University Program Fellow
- DOE Advanced Fuel Cycle Initiative Fellow
- Forbes 30 Under 30



Steve Smith
Chief Operating Officer

- Former US Navy Nuclear Officer
- MS, Old Dominion University
- Oxford University



Wendolyn Holland
Federal Policy Director

- Yale University
- Kellogg MBA
- Previous Director of Strategic Development at Savannah River National Lab



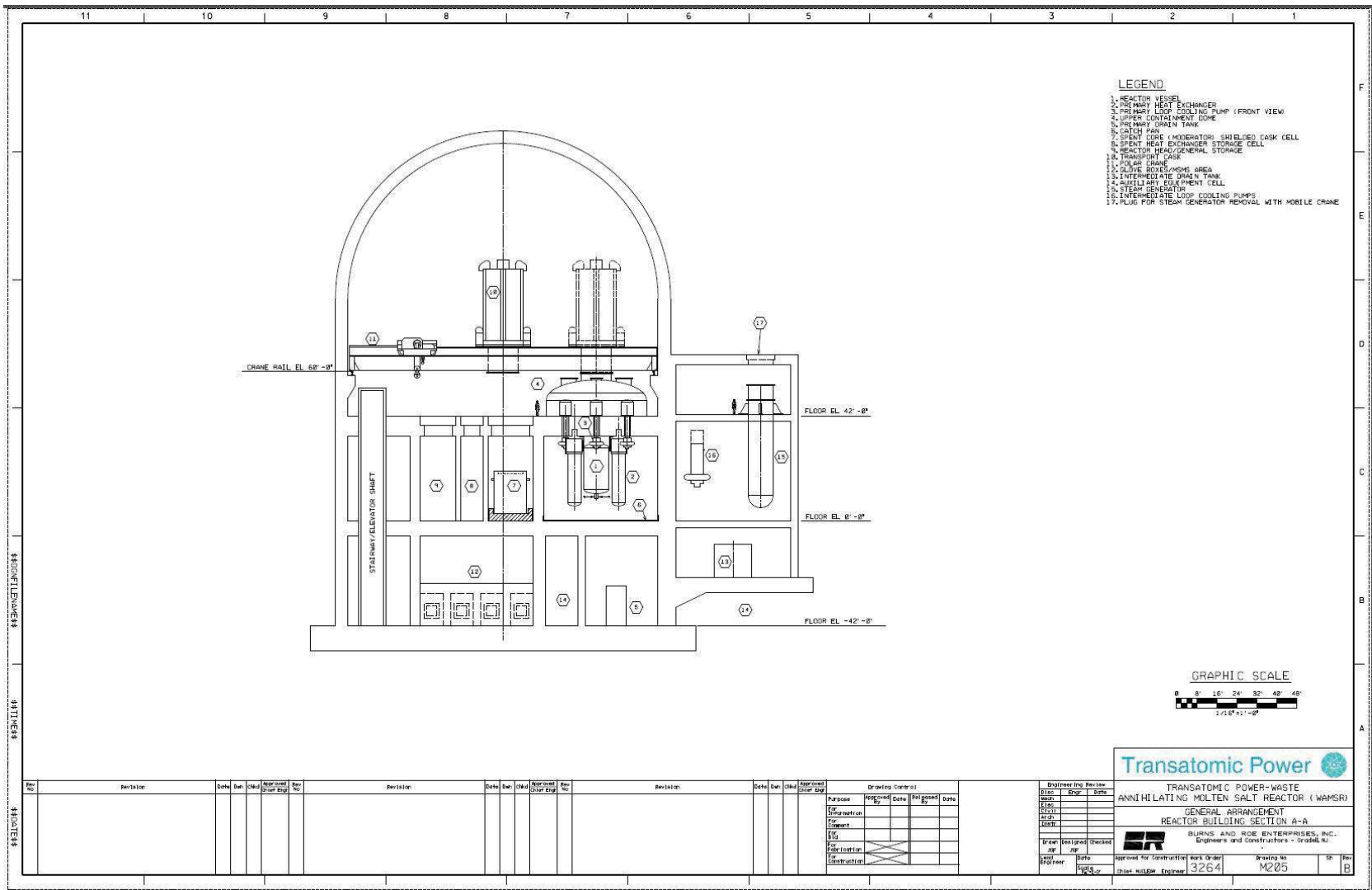
Sean Robertson
Senior Design Engineer

- MS INSTN-CEA, Nuclear Reactor Physics and Engineering

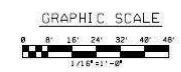


Tim Crook
Nuclear Engineer

- BS, MS Texas A&M
- ANS YMG and OPD



- LEGEND**
1. REACTOR VESSEL
 2. PRIMARY HEAT EXCHANGER
 3. PRIMARY LOOP COOLING PUMP (FRONT VIEW)
 4. UPPER CONTAINMENT DOME
 5. PRIMARY DRAIN TANK
 6. CATCH PAN
 7. SPENT CORE (MODERATOR) SHIELDED CASK CELL
 8. SPENT HEAT EXCHANGER STORAGE CELL
 9. REACTOR HEAD/GENERAL STORAGE
 10. TRANSPORT CASK
 11. MOBILE CRANE
 12. GLOVE BOXES/MEMS AREA
 13. INTERMEDIATE DRAIN TANK
 14. AUXILIARY EQUIPMENT CELL
 15. STEAM GENERATOR
 16. INTERMEDIATE LOOP COOLING PUMPS
 17. PLUG FOR STEAM GENERATOR REMOVAL WITH MOBILE CRANE



Transatomic Power

TRANSATOMIC POWER-WASTE
ANNIHILATING MOLTEN SALT REACTOR (WAMSR)

GENERAL ARRANGEMENT
REACTOR BUILDING SECTION A-A

BURNS AND ROBE ENTERPRISES, INC.
Engineers and Constructors - Global, NJ

Drawn by: [Signature]
Checked by: [Signature]
Approved for Construction: [Signature]
Date: 3/26/4

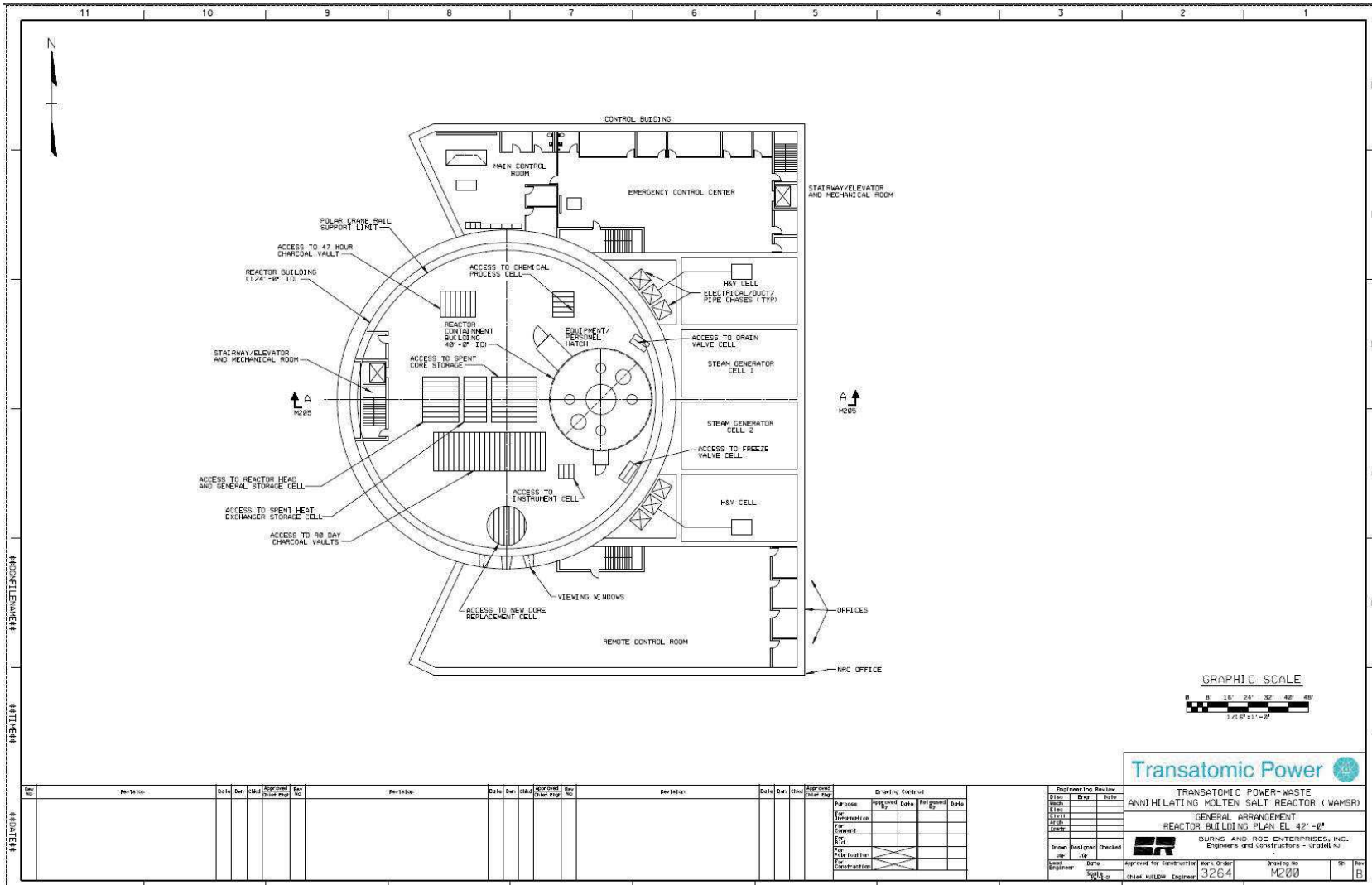
Sheet No: M205

Scale: 1/16" = 1'-0"

Rev. No.	Revision	Date	By	Checked	Approved	Rev. No.	Date	By	Checked	Approved	Rev. No.	Date	By	Checked	Approved

Purpose	Issued By	Date	Relinquished By	Date
Preparation				
Design				
Construction				

Engineer/ing Review	Date	By	Date



#4001125#
 #4001125#
 #4001125#

Rev	Date	By	Check	Approved	Rev	Date	By	Check	Approved	Rev	Date	By	Check	Approved

Drawing Control		Engineer's Review	
Purpose	Prepared By	Date	By

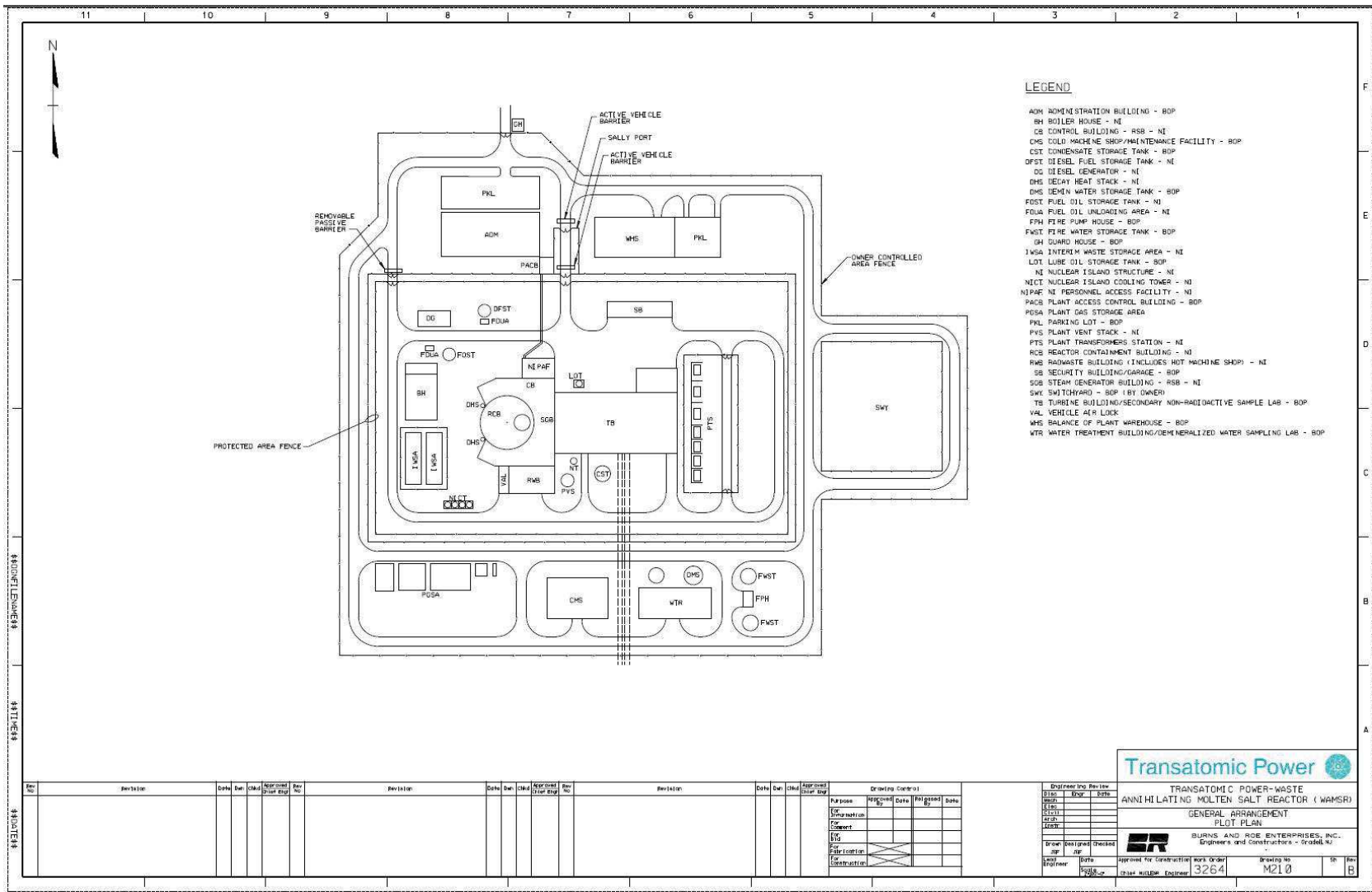
Drawn	Designed	Checked	Approved
By	By	By	By

Approved For Construction	Work Order	Drawing No.	SR

Transatomic Power
 TRANSATOMIC POWER-WASTE
 ANNIHILATING MOLTEN SALT REACTOR (WAMSR)
 GENERAL ARRANGEMENT
 REACTOR BUILDING PLAN EL 42'-0"

BURNS AND ROE ENTERPRISES, INC.
 Engineers and Constructors - Oradell, N.J.

Approved For Construction: **3264** Drawing No: **M200** SR: **B**



LEGEND

- ADM ADMINISTRATION BUILDING - BOP
- BH BOILER HOUSE - NI
- CB CONTROL BUILDING - RSB - NI
- CHS COLD MACHINE SHOP/MAINTENANCE FACILITY - BOP
- CST CONDENSATE STORAGE TANK - BOP
- DFST DIESEL FUEL STORAGE TANK - NI
- DG DIESEL GENERATOR - NI
- DHS DECAY HEAT STACK - NI
- DMS DEMIN WATER STORAGE TANK - BOP
- FOST FUEL OIL STORAGE TANK - NI
- FOUA FUEL OIL UNLOADING AREA - NI
- FPH FIRE PUMP HOUSE - BOP
- FWST FIRE WATER STORAGE TANK - BOP
- GH GUARD HOUSE - BOP
- IWSA INTERIM WASTE STORAGE AREA - NI
- LOT LUBE OIL STORAGE TANK - BOP
- NI NUCLEAR ISLAND STRUCTURE - NI
- NICT NUCLEAR ISLAND COOLING TOWER - NI
- NIPAF NI PERSONNEL ACCESS FACILITY - NI
- PACB PLANT ACCESS CONTROL BUILDING - BOP
- PESA PLANT GAS STORAGE AREA
- PKL PARKING LOT - BOP
- PVS PLANT VENT STACK - NI
- PTS PLANT TRANSFORMERS STATION - NI
- RCB REACTOR CONTAINMENT BUILDING - NI
- RWB RADWASTE BUILDING (INCLUDES HOT MACHINE SHOP) - NI
- SB SECURITY BUILDING/GARAGE - BOP
- SOB STEAM GENERATOR BUILDING - RSB - NI
- SWY SWITCHYARD - BOP (BY OWNER)
- TB TURBINE BUILDING/SECONDARY NON-RADIOACTIVE SAMPLE LAB - BOP
- VAL VEHICLE AIR LOCK
- WHS WAREHOUSE OF PLANT
- WTR WATER TREATMENT BUILDING/DEMINERALIZED WATER SAMPLING LAB - BOP



TRANSATOMI C POWER-WASTE
ANNIHILATING MOLTEN SALT REACTOR (WAMSRI)
GENERAL ARRANGEMENT
PLOT PLAN

BURNS AND ROE ENTERPRISES, INC.
Engineers and Constructors - Glendale, NJ

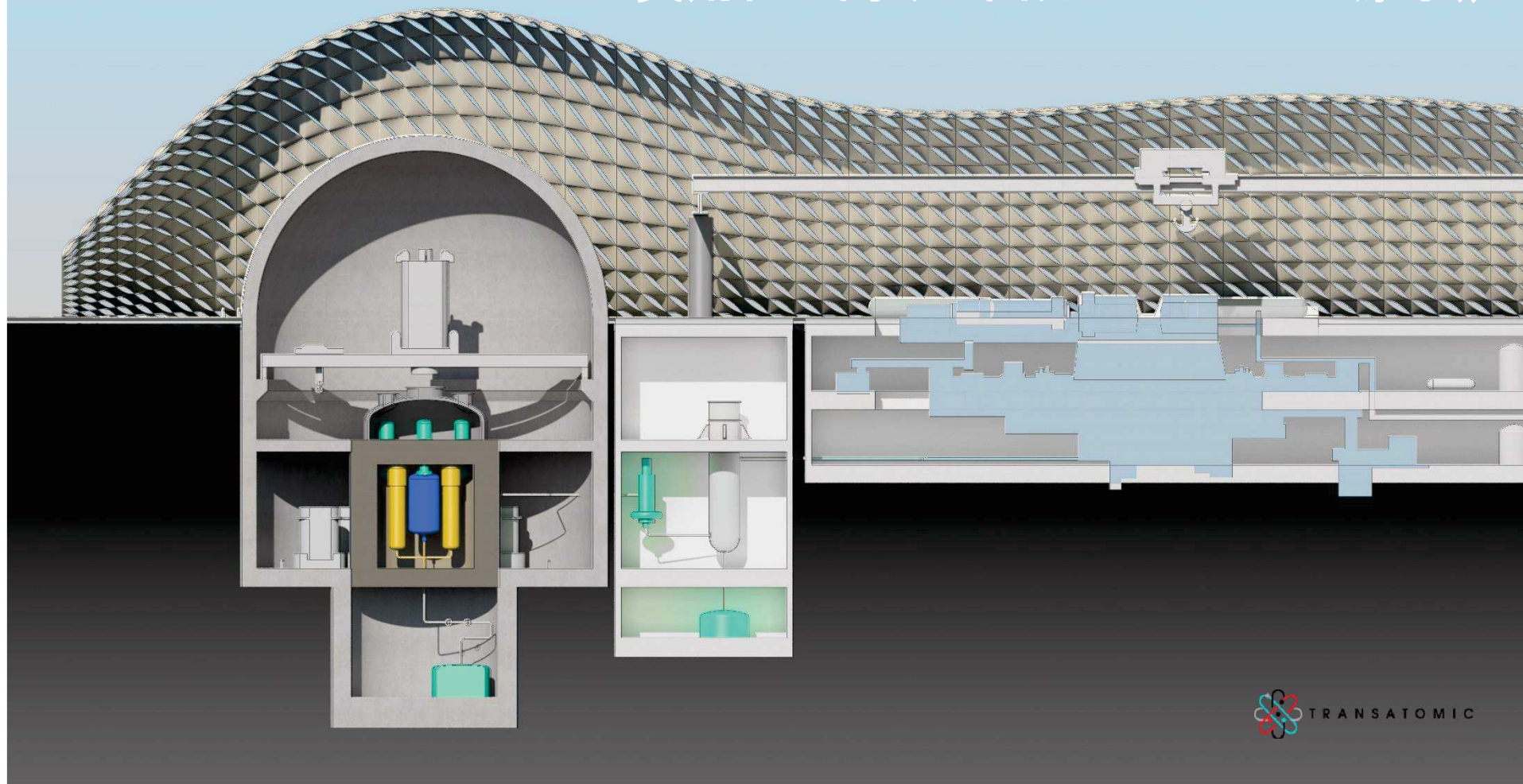
Rev No.	Revision	Date	By	Check	Approved (Over Seal)	Rev No.	Revision	Date	By	Check	Approved (Over Seal)	Rev No.	Revision	Date	By	Check	Approved (Over Seal)

Drawing Control						
Purpose	Approved By	Date	Revised	Date	By	Notes

Engineering Review		
Date	By	Notes

Drawn: [Signature] Checked: [Signature] Date: [Date] Approved for Construction: [Signature] Work Order: 3264 Drawing No: M210 Rev: B

実用化に向けた出力520 MWeの原子炉





FOUNDERS FUND

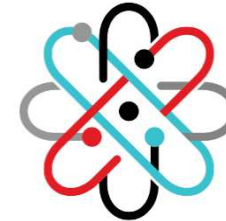


FOUNDERS FUND





FOUNDERS FUND







現状と今後の道筋



COMMITTEE ON
**SCIENCE, SPACE, &
TECHNOLOGY**
Lamar Smith, Chairman





COMMITTEE ON
**SCIENCE, SPACE, &
TECHNOLOGY**
Lamar Smith, Chairman

POLITICS | Thu Mar 23, 2017 | 9:52am EDT

米上院議会、先端原子炉を認可する法案を可決





