

## ENCLOSURE 2

M190133

2Q19 GNF ATF Quarterly Meeting Presentation

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### **IMPORTANT NOTICE**

This is a non-proprietary version of Enclosure 1, from which the proprietary information has been removed. Portions of the enclosure that have been removed are indicated by an open and closed bracket as shown here [[ ]].

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# 2Q19 GNF/NRC ATF Workshop

June 5, 2019



# Agenda

Time		Topic	Who
2:00	15	Public: Introductions and Opening Remarks	Halac
2:15	10	Public: NRC Public Update on ATF	Proffitt
2:25	5	Public: Opportunity for Public Comment	Public
2:30	15	ATF LTA Update (Clinton / Hatch / Other Plants)	Connor
2:45	20	ARMOR Testing Data Update	Connor / Lin
3:05	15	Full Scale Tube Production Readiness	Lin
3:20	15	PNNL PIRT Relative to ARMOR	Bolger
3:35	20	LOCA ARMOR Modeling	Bolger / Lin
3:55	15	LUA / LTA Updates to GESTAR	Halac
4:10	20	High Burnup / Increased Enrichment	Fawcett
4:30	15	Public: Closing Summary and Comment	Proffitt

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# Introductions

# Workshop Agenda Objectives



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# Workshop Outlook

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- Informal Discussions
  - Non-binding information exchange
  - Results shared in an open/candid forum
  - Recommendations welcomed
  - Understanding that shared information is specific to ARMOR and is Confidential GNF-A Intellectual Property
- Primary Scope: Requirements to license new cladding/coating technologies in reload quantities
- Content/Agenda (Determined by mutual agreement)
  - Provide additional information on questions identified from previous meeting
  - Furnish focused project updates on aspects of interest

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# NRC Public Update on ATF

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# Public Comment



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# ATF LTA Update

(Clinton / Hatch / Other Plants)



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# ARMOR Testing Data Update

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# Materials Testing Update

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# Full Scale Tube Production Readiness

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# Manufacturing Upscaling

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# Manufacturing Capability

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# PNNL PIRT Relative to ARMOR

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# PNNL PIRT Relative to ARMOR

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# LOCA ARMOR Modeling



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# TRACG LOCA – ARMOR Sensitivity Studies

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# LUA / LTA Updates to GESTAR



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# LUA / LTA Updates to GESTAR

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# LUA / LTA Updates to GESTAR

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# LUA / LTA Updates to GESTAR

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# LUA / LTA Updates to GESTAR

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# LUA / LTA Updates to GESTAR

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# High Burnup / Increased Enrichment

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# LWR HALEU & Higher Burnup with ARMOR - Pilot Program



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# The Industrial View

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# Focus Areas for HALEU & Higher Burnup

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# Transportation



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# Fuel Performance Experience

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# Burnup Limits & In-Reactor Experience

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# Fuel Storage



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## Spent Fuel Pool and New Fuel Vault Criticality

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# Engineering Methods



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# Engineering Methods

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# Fuel & Reload Licensing



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# Fuel & Reload Licensing Approach

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# Dry Cask Storage



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## Dry Storage Requirements

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## Notional Timeline

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# Summary & Next Steps



# Summary

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- ATF LTA Update (Clinton / Hatch / Others)
- ARMOR Testing Data Update
- Full Scale Tube Production Readiness
- PNNL PIRT Relative to ARMOR
- LOCA ARMOR Modeling
- LUA / LTA Updates to GESTAR
- High Burnup / Increased Enrichment

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