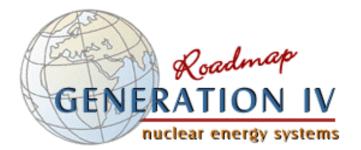
Roadmap Integration Team Presentation



Generation IV Roadmap Crosscut Groups

GRNS Meeting: Washington, D.C. October 2, 2001

GRNS Oct 2-3 Presentation GP05-00

02-Oct-01

Crosscut Groups 1

Background

- Initial Roadmap plan called for:
 - Fuel Cycle Crosscut group to be formed early in process to conduct a comparative assessment of alternative fuel cycles
 - Additional crosscut groups to be formed to investigate other areas that could potentially benefit from common R&D

Status

- Fuel Cycle Crosscut Group has drafted a report and hopes to complete it in 2 weeks
- In May, the RIT and GRNS discussed the topics to be covered by additional crosscut groups
- In August, the RIT continued these discussions with the WG co-chairs and then the WG members
- Recommendation:
 - -- Four additional crosscut groups should be formed with R&D topics assigned to each group
 - -- FCCG should extend its work into the same deliverables as the new CGs

Recommended Crosscut Groups

- Fuel Cycle Crosscut Group
- Fuels and Materials Crosscut Group
- Risk and Safety Crosscut Group
- Economics Crosscut Group
- Energy Products Crosscut Group

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R&D Topics Assigned to Each CG

FCCG

- Fuel Cycles
- Mining
- Enrichment
- Reprocessing
- Transmutation
- Waste disposal
- Non-proliferation

<u>RSCG</u>

- Static & transient analysis
- Design basis analysis
- Instrumentation and control
- Balance of plant
- Probabilisitic risk assessment
- Risk-based regulation
- Personnel safety

<u>FMCG</u>

- Fuel, cladding, absorbers
- Fabrication
- Fuel testing
- Spent fuel behavior
- Structural materials
- Materials compatibility and testing

<u>ECG</u>

- Economic models
- Modularity
- Constructability
- Standardization
- Economics of operation
- Power conversion

<u>EPCG</u>

- Electricity
- Hydrogen production
- Desalination
- District & process heat
- Cogeneration

Crosscut Group Work Scope

- Look for opportunities for common R&D
- Identify objectives for common R&D
- Identify how common R&D improves ability to meet goals
- Identify scope, schedule, and cost for common R&D
- Recommend R&D priorities (R&D needed most to reduce uncertainties)
- Contribute sections to R&D Scope Reports
- Review WG reports for consistency of scoring in crosscut areas
- Prepare reports on specific issues as needed, possibly with the aid of Specialists Review Groups
- Write Joint R&D Planning Report with input from TWGs

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Crosscut Group Work Process

- CG work is done in parallel with TWG work
- Project scope, schedule, and deliverables remain the same, but some responsibility is shifting to CGs

- TWGs remain responsible for R&D Scope Reports
- CG work is incorporated into R&D Scope Reports

• CGs and TWGs are responsible for Joint R&D Planning Report

Specialists Review Groups

- Established as needed by CG Co-Chairs
- Work on specific topics owned by CG, e.g. Instrumentation & Control SRG within RSCG
- Perform tasks requested by CG Co-Chairs
 - Review R&D gaps in special areas
 - Develop R&D plan in special areas
- SRGs may include unpaid volunteers not within any TWG or CG
- CG Co-Chairs own any SRG products

Roadmap Milestones in 2002

11-Jan-02	Draft Roadmap	RIT
25-Jan-02	R&D scope report (draft-1 per TWG)	TWGs /CGs
22-Mar-02	R&D scope report (final-1 per TWG)	TWG s/CGs
26-Apr-02	Final screening complete	RIT
31-May-02	Interim Roadmap	RIT
21-Jun-02	Viability/Performance evaluation methodology report (final)	EMG
28-Jun-02	Final R&D planning report	CGs/TWGs (joint)
02-Aug-02	Final Roadmap (draft)	RIT
27-Sep-02	Final Roadmap	RIT

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Crosscut Group Rosters

	FCCG	FMCG	RSCG	ECG	EPCG
EMG	W. Halsey	*D. Crawford	*P. Peterson D. Bley	K. Miller *G. Rothwell E. Bertel	M. Golay
TWG1	B. Boullis	G. Was P. MacDonald	M. Carelli	K. Hedges P. Lauret *M. Corradini	A. Vasile
TWG2	K. Fukuda D. Greneche	*W. von Lensa T. Abram D. Moses	S. Ball B. Ballot J. Royen	A. Kadak	A. Shenoy M. Ogawa
TWG3	C. Boardman *D. Wade J. Glatz	N. Li	S. Rosen K. Suh	J. Touhy M. Ichimiya	Y. Sagayama
TWG4	*C. Forsberg M. Leroy	W. Park C. Garzenne	M. Delpech *P. Pickard	T. Lennox	*L. Peddicord *A. Klein D. Lewis S. Herring
NTDG			J. Binder	C. Braun	
RIT	H. Khalil	T. Allen	G. Fiorini	R. Bennett	J. Ryskamp
Other	H. Noda L. Van Den Durpel				

Path Forward

- Finalize CG structure, scope, and roster at this meeting
- Contact co-chairs and members to confirm participation
- RIT drafted CG charters for negotiation with CG co-chairs
- The first meeting of the new crosscut groups will be held in San Francisco for 1 to 1.5 days.