



RIT Update

***GRNS Meeting: Washington, D.C.
October 2-3, 2001***

Introduction

- ***Perspective on RIT presentations today and tomorrow***
- ***Overview of RIT actions and progress***
- ***Highlights of the Aug 21–23 Quarterly meeting in Seattle***
- ***Plans for the Nov 27–29 Quarterly in San Francisco***
- ***Plans for the GIF Oct 10-11 Policy meeting in Miami***

RIT Presentations at this Meeting

Tuesday

<i>Bennett</i>	<i>RIT Overview</i>
<i>Ryskamp</i>	<i>1. Planned Steps</i>
<i>Khalil</i>	<i>3. Concept Selection</i>
<i>Bennett</i>	<i>5. Fuel Cycle Integration</i>
<i>Ryskamp</i>	<i>6. Crosscut Groups</i>

Wednesday

<i>Versluis</i>	<i>Public Communication & Outreach</i>
<i>Fiorini</i>	<i>Risk-Based Regulation R&D</i>

RIT Activities

- ***Supported each Working Group meeting***
- ***Oversaw completion of the Draft Concept Reports***
 - ***Bi-weekly co-chair conference calls in June/July***
 - ***RIT meeting on Aug 9 to review reports***
 - ***Co-chair conference call on Aug 9 to review issues***
 - ***Pre-meeting in Seattle to discuss resolution of issues***
- ***Conducted the Seattle quarterly meeting***
- ***Debated the alternatives for Portfolios***
- ***Prepared the Crosscut Groups***

Seattle Meeting Highlights

- **Shorter Plenary:**
 - **Status and Issues for the TWG Concept Reports**
 - **Roadmap Outline**
 - **Preview and Discussion of Crosscut Groups**
 - **Assignments for Seattle**
- **Major Assignments at Meeting:**
 1. **Work Concept Report Issues**
 2. **Begin R&D Gap/Needs Identification**
- **Dynamics:**
 - **Excellent meeting attendance**
 - **Growing concern over downselection**
- **Presentations available on roadmap web site, www.gen4.anl.gov (participant web site)**

Current Chronology of Events

- **July 31** **Draft TWG Reports due**
- **Aug 9** **RIT Review of Reports**
- **Aug 9** **Teleconference with co-Chairs to Identify Issues**
- **Aug 20** **Pre-meeting Discussion with co-Chairs to Identify Resolutions**
- **Aug 21-23** **Seattle Quarterly Meeting**
- **Sep 28** **Interim Draft TWG Reports due**

- **Oct 10-11** **GIF Policy Meeting in Miami**
- **Nov 16** **Final TWG Reports due**
- **Nov 27-29** **San Francisco Quarterly Meeting**
- **Dec 10-11** **GRNS Meeting in Washington**

TWG Concept Reports: Objective

- ***Organize and describe concept sets***
- ***Report results of screening for potential***
- ***Identify R&D gaps***

- ***The reports are a Foundation for the Roadmap***
 - ***Global, well-informed viewpoint***
 - ***Authoritative and unbiased scoring***
 - ***Effective at communication***

TWG Concept Reports: Status

	<i>Report (pages)</i>	<i>Appendices (pages)</i>
<i>Water</i>	35	250
<i>Gas</i>	10	80
<i>Metal</i>	50	120
<i>Non-Classical</i>	50	10

Roadmap Concepts

- **Water**

- **Integrated Primary System Reactors** **IPSR**
- **Loop PWRs** **LPWR**
- **Simplified BWRs** **SBWR**
- **Pressure Tube Reactors** **PTR**
- **Supercritical Water Reactor** **SCWR**
- **High Conversion Cores** **HCC**
- **Pebble Fuel Reactor** **PFR**
- **Thorium Fuel Cycle*** **ThFC**
- **Dry Recycling of Spent LWR Fuel*** **Dry Rec**

- **Gas**

**referred to FCCG*

- **Pebble Bed Reactors** **PBR**
- **Prismatic Modular Reactors** **PMR**
- **Very High Temperature Reactors** **VHTR**
- **Fast Gas Reactors** **FGR**

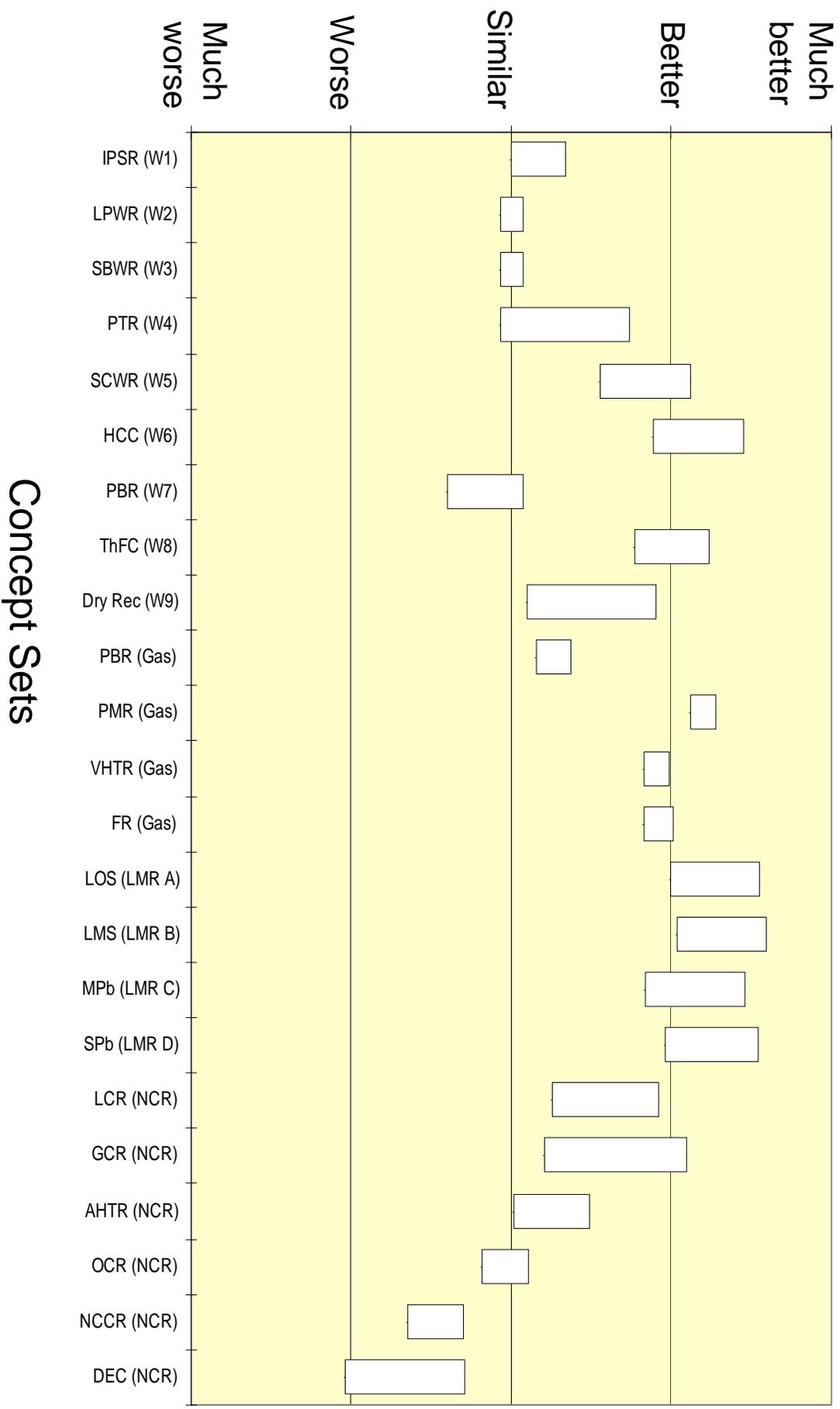
Roadmap Concepts

- **Liquid Metal**
 - **Medium-to-large Sodium Cooled Reactors, MOX fuel** **LOS**
 - **Medium-to-large Sodium Cooled Reactors, metal fuel** **LMS**
 - **Medium-size Lead or Lead/Bismuth Cooled Reactors** **MPb**
 - **Sodium-cooled Concepts with Novel Steam Generators** **SPb**

- **Non-Classical**
 - **Liquid Core Reactors** **LCR**
 - **Gas Core Reactors** **GCR**
 - **Advanced High Temperature Reactor** **AHTR**
 - **Organic Cooled Reactors** **OCR**
 - **Non-convective Cooled Reactors** **NCCR**
 - **Direct Energy Conversion Reactors** **DEC**

Screening for Potential - Sustainability

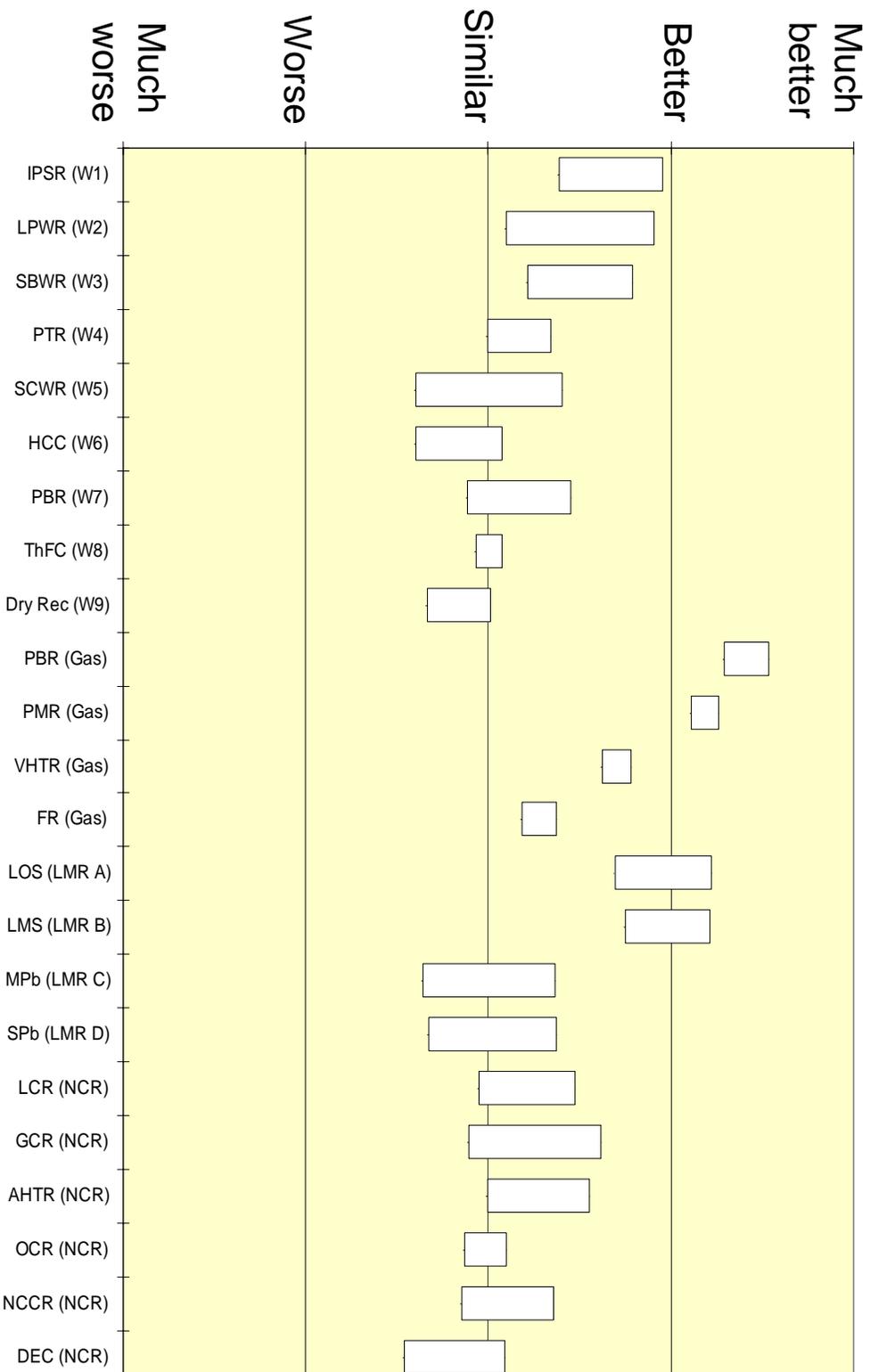
(Data as of October 1, 2001)



Concept Sets

Screening for Potential - Safety and Reliability

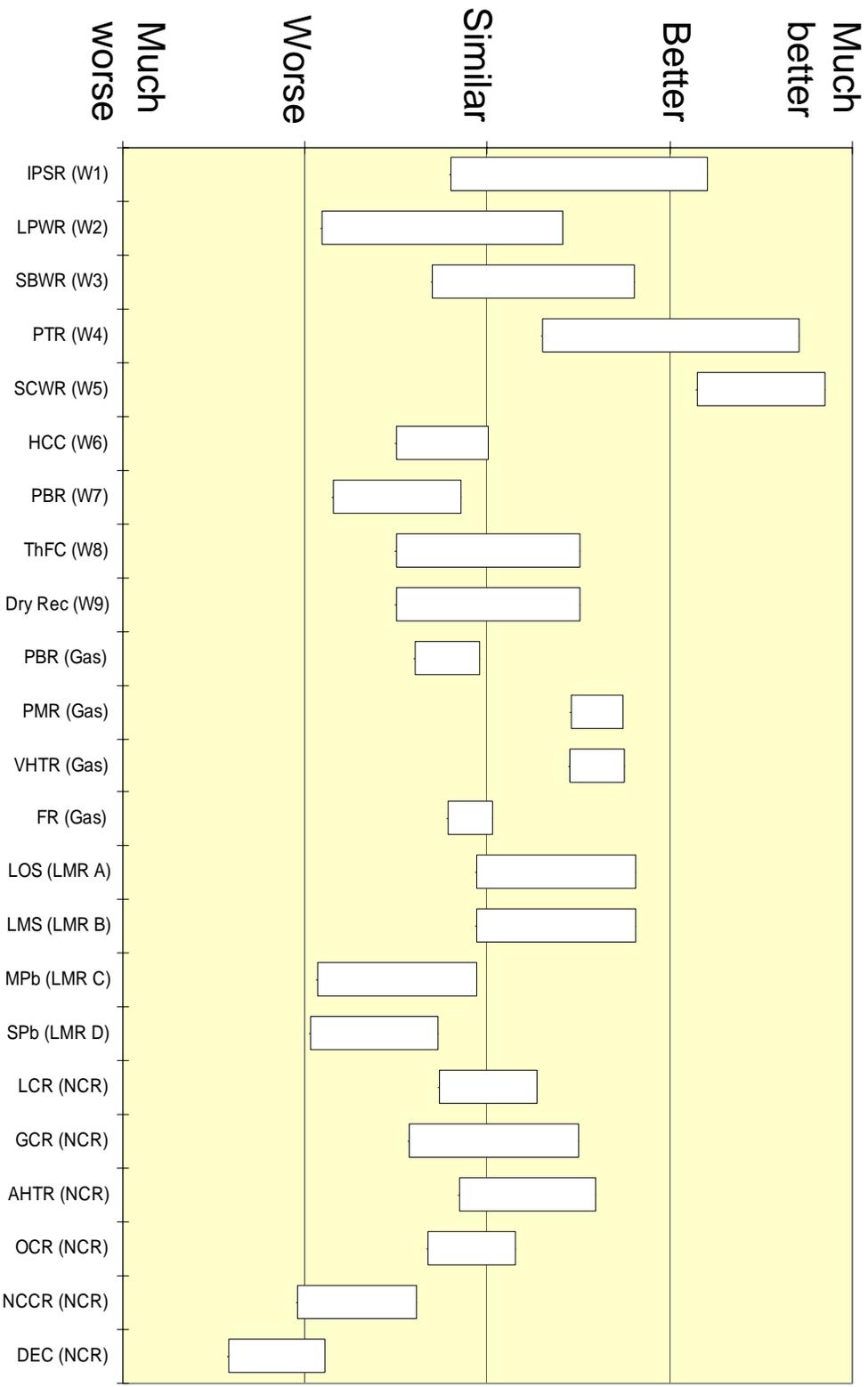
(Data as of October 1, 2001)



Concept Sets

Screening for Potential - Economics

(Data as of October 1, 2001)



Concept Sets

San Francisco Quarterly Meeting Plans

General Organization of the Meeting

- ***Provide time for both WG and CG meetings***
- ***Abbreviated plenaries (start and end) of WG section***
- ***Plenaries for first CG section are being explored***

Details

- ***Allow 1-1/2 days for WG meetings (Tues mid-am–Wed mid-pm)***
- ***Plenary late Wednesday for start of CG meetings Thursday***
- ***Allow 1-1/2 days for CG meetings (Thur–Fri am)***
- ***Plenary to close Friday noon***

Assignments at Quarterly Meetings

	<i>Current Assignment</i>	<i>Look Ahead Assignment</i>
<i>Feb '01</i>	<i>Search for concepts</i>	<i>Draft concept list</i>
<i>May '01</i>	<i>Concept list</i>	<i>Practice screening</i>
<i>Aug '01</i>	<i>Consistent screenings</i>	<i>Draft R&D gaps and needs</i>
<i>Nov '01</i>	<i>R&D gaps and needs</i>	<i>Practice evaluation</i>
<i>Apr '02</i>	<i>Final evaluation</i>	<i>R&D Plan integration</i>
<i>Jun '02</i>	<i>R&D Plan finalization</i>	<i>Final Roadmap reviews</i>

GIF Miami Meeting Plans

Background

- ***GIF Charter Signed in mid-July***
- ***IAEA has sent six new Roadmap members***
- ***NEA is supplying secretariat support for Metal and Gas WGs***

Main Subjects of Policy Group Meeting

- ***Roadmap Update (Bennett)***
- ***Steps to the GIF Endorsement of the Roadmap***
 - ***Draft Roadmap available to GIF in February***
 - ***Proposed March meeting to discuss downselection***
 - ***Endorsement needed in July 2002***
- ***Activity on New Members***
 - ***Switzerland will be presented***
 - ***Others will be discussed generally***
- ***Secretariat will be assigned a first term***