Beyond Initial Licensing NRC License Maintenance Expectations

Uranium Recovery Workshop 2012

May 2, 2012

10:30 - 11:00 AM

Presenter: Wayne Heili, Ur-Energy

Background

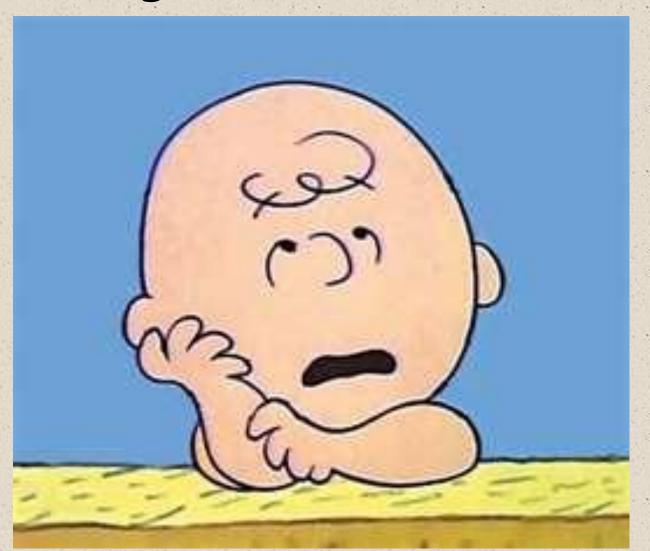
NRC tracks Major Uranium Recovery License (URL)
 Applications and their status using a cooperative process

Major Uranium Recovery Licensing Applications							
Company	Site Under Consideration	Design	Estimated Application Date	Date Accepted	State	Status	Letter o
Cameco (Crow Butte Resources)	North Trend	ISR - Expansion	Applications Received June 2007	08/28/2007	NE	T	N
dameco (Crow Bulle Resources)	North Trend		Applications	08/28/2007	NE	Tech Review Ongoing	None
Powertech Uranium Corporation	Dewey Burdock	ISR - New	Resubmitted 8/09	Oct-09	SD	Tech Review Ongoing	01/26/07
owertech Oranium Corporation	Dewey Burdock		Applications	OCI-09	SD	Tech Review Ongoing	01/20/01
trata Energy, Inc.	Ross	ISR - New	Rec. January 2011	Jun-11	WY	Tech Review Ongoing	01/08/1
bilata Eriergy, Iric.	11033		Applications	Juli-11	441	Tech Review Origoning	01/06/1
Jranium One	Ludeman	ISR - Expansion	Rec. December 2011		WY	Acc. Review Ongoing	11/28/1
ost Creek ISR LLC	Lost Creek	Dryer-Expansion	Rec. January 2012		WY	Adding Dryer	01/06/10
Cameco (Crow Butte Resources)	Marsland	ISR - Expansion	Apr-12		NE	Adding Bryer	11/09/1
AUC LLC	Reno Creek	ISR - New	Apr-12		WY	Pre-Sub Audit 11/11	11/03/1
Cameco (Crow Butte Resources)	Three Crow	ISR - Expansion	Rec. 08/10. Resubmit 05/12		NE	Review Deferred	01/11/1
Jranium One	Allemand-Ross	ISR-Expansion	Jun-12		WY	Treview Deletted	10/08/1
itan Uranium USA. Inc.	Sheep Mountain	Heap Leach - New	Jul-12		WY	Pre-Sub Audit 10/11	11/11/1
Strathmore Minerals Corporation	Roca Honda	Conv New	Sep-12		NM	FTE-Sub Addit TO/TT	11/19/1
Jranium Company of Nevada, LLC	Apex Mill	Conv New	Sep-12		NV		11/11/1
ranian company of Nevada, EEC	7 Apex IIIII		Applications		144		1111111
Jranerz Energy Corp.	Jane Dough	ISR-Expansion	Nov-12		WY	ı	10/07/1
ost Creek ISR, LLC	Lost Creek	KM-Horizon Exp.	Dec-12		WY		03/29/1
Strathmore Minerals Corporation	Gas Hills	Heap Leach - New	Feb-13		WY		02/08/1
leutron Energy	Juan Tafoya	Conv New	Jun-13		NM		03/02/1
Jranium One	Jab and Antelope	ISR - New	Rec. 07/08. Resume FY 13		WY	Review Deferred	05/31/0
Cameco (Power Resources, Inc.)	Ruby Ranch	ISR - Expansion	FY 2013		WY		01/14/1
Rio Grande Resources	Mt. Taylor	Conv New	TBD		NM		11/10/1
Jranium Energy Corporation	Grants Ridge	Heap Leach - New	TBD		NM		01/15/1
3/			Applications				
Pregon Energy, LLC	Aurora Uranium Project	Conv New	Dec. 2013		OR		04/03/1
JR-Energy Corp.	Lost Soldier	ISR - Expansion	FY14		WY		11/01/1
he Bootheel Project LLC	Bootheel	ISR-New (Satellite)	FY14		WY		08/09/1
			censing Actions				
Cameco (Crow Butte Resources)	Crawford, NE	ISR - Lic. Renew.	Received Dec. 2007		NE	Draft License Issued	
Iranium One	Willow Creek	ISR - Lic. Renew.	Received May 2008		WY	Tech Review Ongoing	
Cameco (Power Resources, Inc.)	Smith Ranch/Highland	ISR - Lic. Renew.	Feb-12		WY	Acc. Review Ongoing	
lydro Resources, Inc.	Crownpoint	ISR - Lic. Renew.	Rec. 8/02, on hold until 2012		NM		
ennecott Uranium	Sweetwater Mill	Conv - Lic. Renew.	Oct-14		WY		
Cameco (Power Resources, Inc.)	North Butte	ISR - Ops Plan	Feb-12		WY	Inc.w/Smith R. renewal	09/09/1
Cameco (Power Resources, Inc.)	Gas Hills	ISR - Ops Plan	Feb-12		WY	Inc.w/Smith R. renewal	09/09/1
Cameco (Power Resources, Inc.)	Ruth	ISR - Ops Plan	FY 2022		WY		09/09/1
			No. of New F	acility Applic	ations =	13	
			No. of Restart/Expan			10	
				No. of Other			
				of Licensing			

Background – continued

- Several new licenses have been issued
- New and existing licenses have on-going license maintenance needs
- Little information is available on how the license maintenance activities are planned for and scheduled at the NRC

"It seems like everything takes so long back there in D.C."



What is a "Major URL Application?"

 The following application types appear on the NRC worksheet

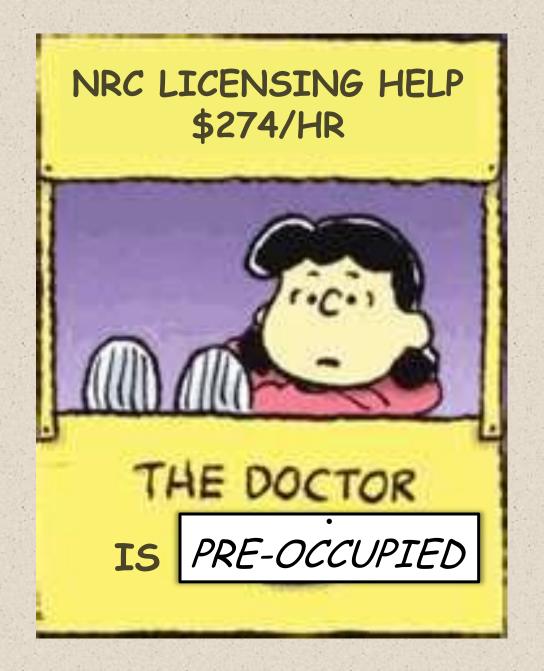
- 1. New ISR, Heap and Conventional Facilities
- 2. Restarts
- 3. Expansions
- 4. License Renewals
- 5. ISR Operations Plan
- 6. ACL Reviews

What is Not a "Major URL Application?"

- The following NRC Reviews are <u>not</u> tracked on the NRC Major URL Applications worksheet
 - 1. Review/Verification of License Conditions
 - 2. Wellfield Package Reviews
 - 3. Most License Amendments
 - 4. Restoration Approvals
 - 5. Reclamation Approvals
 - 6. License Transfers
 - 7. License Terminations
 - 8. Annual Reports/Financial Assurance Review

What's What?

- License Maintenance Activities (LMAs) span a wide range of review time requirements
- Not all LMAs occur with predictable frequency
- There is some ambiguity on what is a Major URL activity and what is a LMA
- No matter how the activity is defined, the Licensee has an expectation of a prompt review and approval process at a reasonable cost
- Guidance on cost and advanced time requirements would be valuable to Industry



Workload Reduction Tools

 The NRC could improve efficiency of reviews by optimizing the implementation of these available tools

- 1. Generic Environmental Impact Statements (GEIS)
- 2. Performance Based Licensing (PBL)
- 3. Part 51 (NEPA) Regulations

NRC GEIS Utilization

- NUREG-1910 and NUREG-0706 address common environmental concerns associated with construction, operation & decommissioning of uranium recovery facilities
 - 1. The intended benefit of these documents was to reduce time spent on reviews
 - 2. NEPA is only intended for "Major Federal Actions"
 - 3. Efficiency will be gained when the agency uses the GEIS's as the starting point for site specific reviews

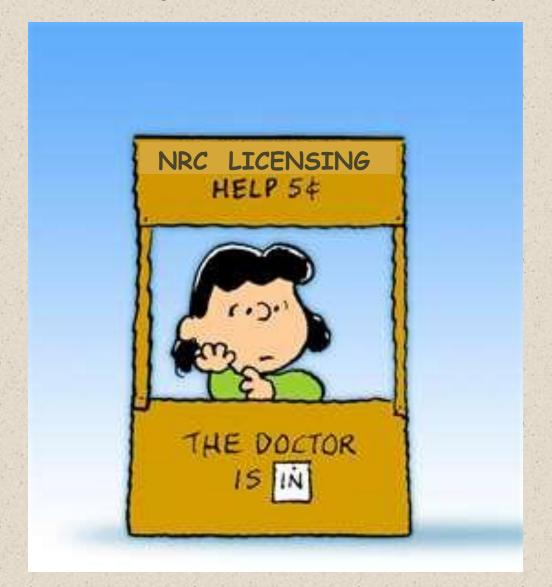
Performance Based Licenses

- NUREG/CR-6733 and NUREG-1860 provide the risk assessment foundation for PBLs
 - 1. Staff has been restricting actions that can be approved by a SERP in recent licenses
 - 2. Each review that must be done by Staff rather than by SERP adds to the agency workload
 - Expansion of the use of PBLs and SERPS is justifiable due to the very low risks posed by URLs

Part 51 Regulations

- NRC's Implementation of CEQ-NEPA Regulations are found in 10CFR51
 - 1. 51.15 establishes the need for time schedules
 - 2. 51.22(c)(22) allows for the creation of Standard Design Criteria (SDC)
 - Items covered by SDCs can be categorically excluded from certain environmental reviews
 - The goal should be to create better documents, not larger documents, so that better decisions can be made

"Is it Just a Dream?"



Cost Estimating Tools

- Licensees have need of a means to effectively budget for NRC staff reviews. NRC would also benefit.
 - 1. Schedule of costs for common tasks
 - 2. Agency internal review of estimated manpower requirements for each type of LMA
 - 3. Efficiency will be gained when a risk-based analysis is applied to the estimated hours

Forecasting Tools

- The NRC could improve workload planning by implementing a process for annual data collection and tracking of upcoming LMAs
 - 1. Survey Industry similar to process for URLs
 - 2. Industry should be cooperative if the expectation is a more predictable review process
 - 3. Not all LMAs can be predicted
 - Scheduling must allow for flexibility within reason

Agency - Industry Cooperation Leads to a Happy Ending for All!



"Snap out of it! Five cents please."



Recommendations

- Prepare guidance on what constitutes a Major License Application and what can be scheduled as License Maintenance
- 2. Take full advantage of available GEIS reports
- 3. Take full advantage of the Performance Based License features
- 4. Utilize the efficiencies that Part51 and NEPA call for
- Develop a risk-informed cost schedule for common review activities
- 6. Develop forecasting tools for annual assessment of license maintenance activities

"Thanks for listening"

Wayne

