

# AFCI Texas Consolidated Interim Storage Project



## The Opportunity

- **A complete solution to a problem that has defied solution for over 55 years**
  - Provide basis for Continued Storage
  - Provide Basis for Reinstatement of fee
  - Mitigate damage claims
- **Supportive Federal, State and local officials**
- **Economically efficient solution**
  - Transport SNF one time for interim storage and potential final disposition
  - Retain flexibility to accommodate future policy choices



## Why Now?

### ▪ United States is running out of options

### ▪ Continued Storage Rule

- New NRC rule will be challenged
  - DC Circuit unsympathetic to vague statements about government's plan to dispose of waste
  - Our plan will include final disposition option
- No Continued Storage Rule—no new reactors
  - A dead end for the US nuclear industry

### ▪ Waste Fee Litigation

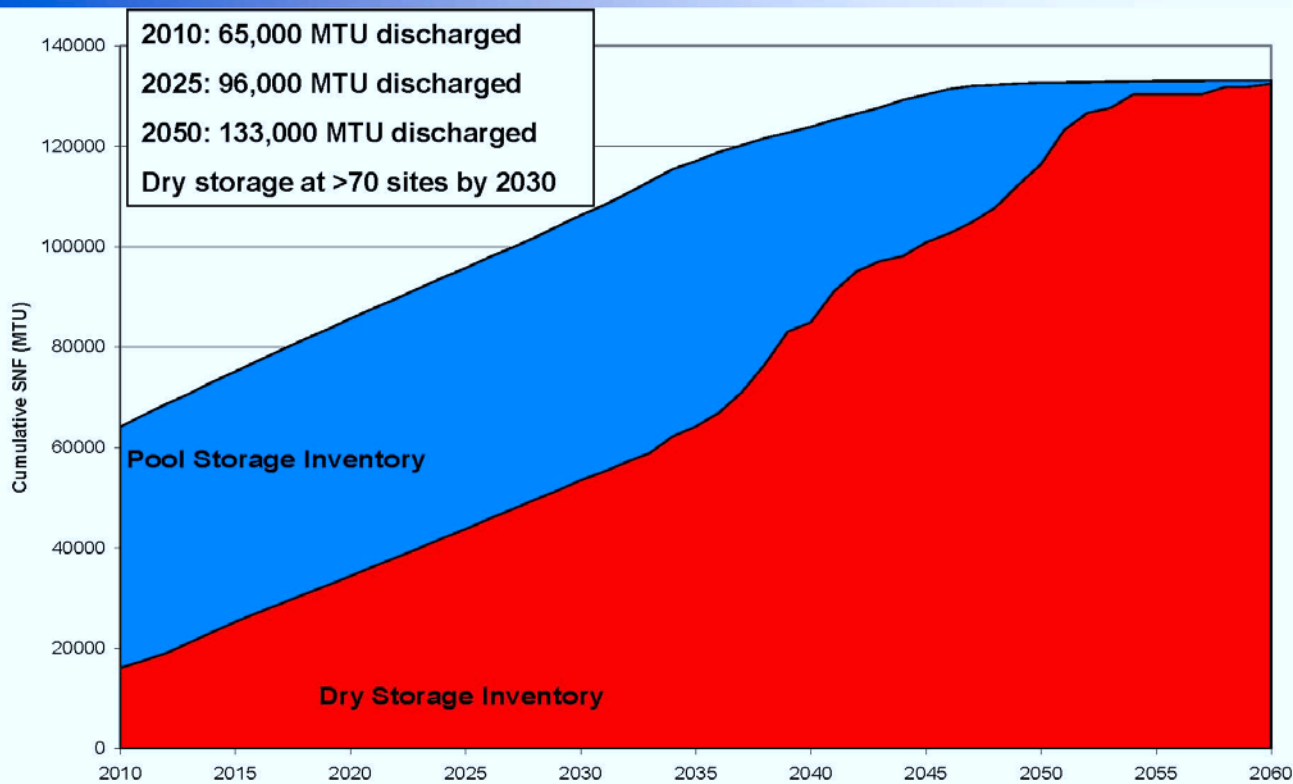
- Zero fee puts pressure on federal budget
- Remaining reactors will eventually pay more

### ▪ Damage Suits

- \$50 billion in utility claims
- No meritorious defenses

# SNF—A Growing Issue

**Cumulative U.S. Commercial Spent Nuclear Fuel Inventories – 2010 to 2060 (assumes no nuclear expansion, 60-year life)**



Aug 2010, Energy Resources International, Inc.

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## No Place for SNF to Go

- No disposal site
- No recycling The URS logo consists of the letters 'URS' in a stylized, outlined font. The 'U' and 'R' are connected at the top, and the 'S' is positioned to the right of the 'R'.
- No fast reactors
- Spent fuel pools filling up
- No consolidated interim storage

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URS

## Our Project—Milestones

### ▪ Since 2007:

- State signed letter of intent to make state owned land available for consolidated interim storage
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- Texas House Speaker issued interim charge directing study
- Governor Perry issued letter recommending action
- Substantial Project Development Activity

# Texas Letter of Intent

GLO Letter of Intent, Page 2



## Non-Binding Letter of Intent to Negotiate a Lease of State-Owned Land

August 30, 2011

Mr. Bill Jones  
AFCI Texas, LLC.  
100 Congress Avenue, Suite 2000  
Austin, Texas 78701

RE: Commercial Lease for Interim Storage of Spent Nuclear Fuel

Dear Mr. Jones:

The State of Texas, operating through the General Land Office/School Land Board ("GLO") on behalf of the Texas Permanent School Fund ("PSF"), owns and controls approximately 730,000 surface acres throughout the state. You have approached us representing AFCI Texas, LLC, ("AFCI") in an effort to obtain a long-term lease on PSF lands. AFCI or its successors and assigns, proposes to construct and maintain a storage facility capable of storing spent nuclear fuel ("SNF") on an interim basis. Such facility would not be for the storage of low-level nuclear waste or naturally occurring radioactive material.

This letter expresses the GLO's interest in negotiating on behalf of the PSF, a surface lease for the proposed interim storage of SNF. The first step in the negotiation process would be the identification of a potentially suitable site on available PSF land mutually agreeable to the GLO and AFCI. The second step would be the preparation and presentation to the GLO by AFCI of additional business plan information as requested during lease negotiations. Additional business plan information may include: a regulatory survey of required permits and/or potential state federal approvals, an analysis of the market (including the competitive environment, and the proposed management and operation of any facilities). GLO may also request additional information pertaining to: the proposed ownership structure, a detailed budget, anticipated financing for construction, start-up costs, costs for on going operations, and a timeline for each step of the process. The GLO will work with you to establish what information will be needed, however the GLO shall not be liable for any costs associated with the additional information requested or any other expenses.

The GLO intends to initiate site selection and provide to AFCI a list of potential sites for consideration. At the time of this letter, no specific sites have been discussed by either party.

Stephen F. Austin Building • 1700 North Congress Avenue • Austin, Texas 78701-1495  
Post Office Box 12873 • Austin, Texas 78711-2873  
512-463-5001 • 800-998-4GLO  
[www.glo.state.tx.us](http://www.glo.state.tx.us)

Either the GLO or AFCI may (i) refuse to initiate, or (ii) may terminate, the negotiation process at any time and for any reason without any cost, expense or obligation of any kind to the other, by written notice.

**THIS LETTER IS NOT A CONTRACT. IT IS MERELY A NON-BINDING EXPRESSION OF AN INTENT TO NEGOTIATE FOR A POSSIBLE FULLY-INTEGRATED CONTRACT THAT IS ABSOLUTELY SUBJECT TO THE FORMAL APPROVAL AND EXECUTION ON BEHALF OF BOTH PARTIES.**

Thank you,

**THE STATE OF TEXAS,**  
Operating by and through the Texas General Land Office  
on Behalf of The Permanent School Fund



Rene D. Truan  
Deputy Commissioner  
Professional Services Division



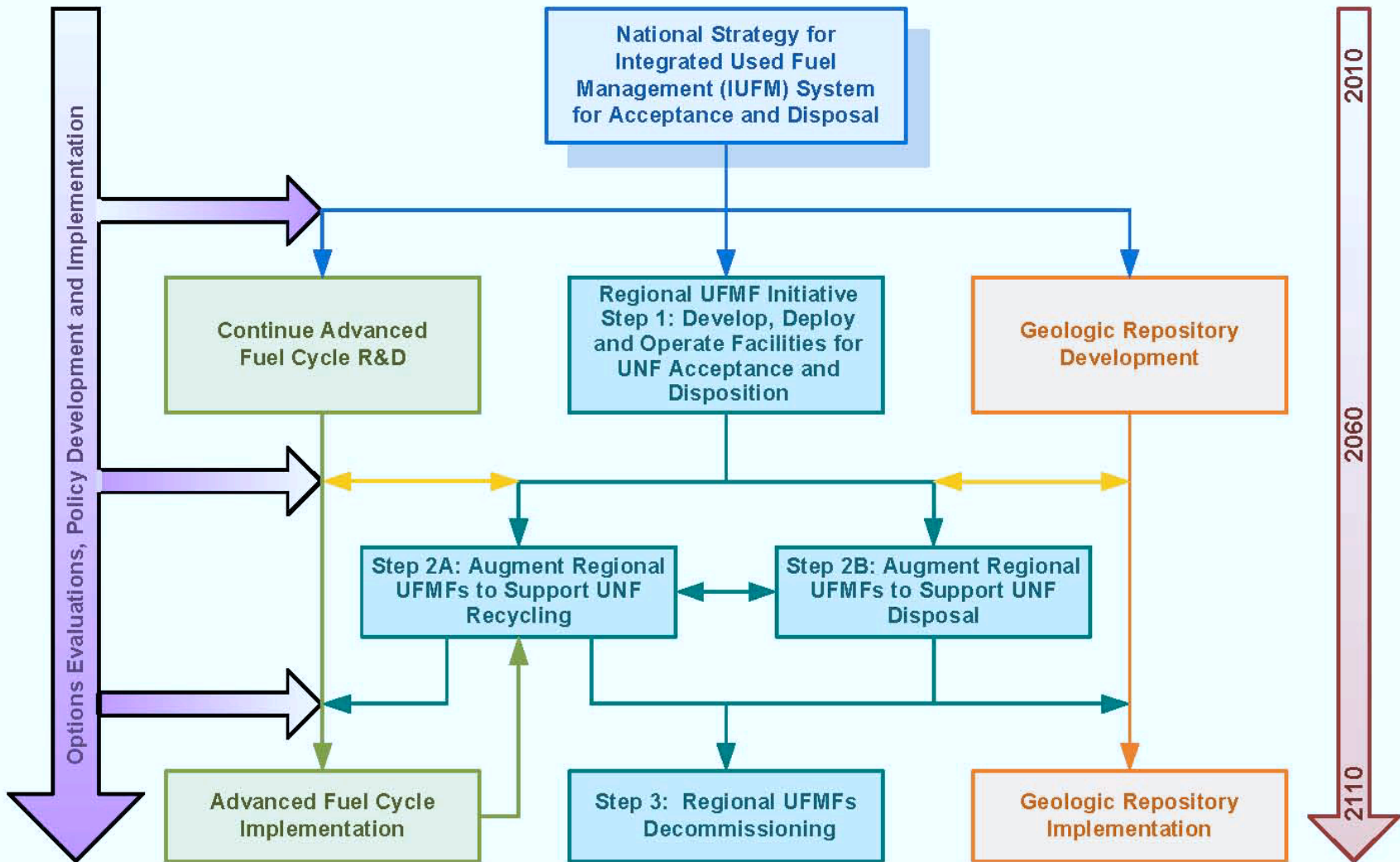
## Western Texas—Potential Sites

### ■ Facts—

- Near WIPP, URENCO, WCS
- Shares WIPP geology
- Sparse population
- Pantex, Los Alamos, Sandia nearby



# A Relationship With a Future



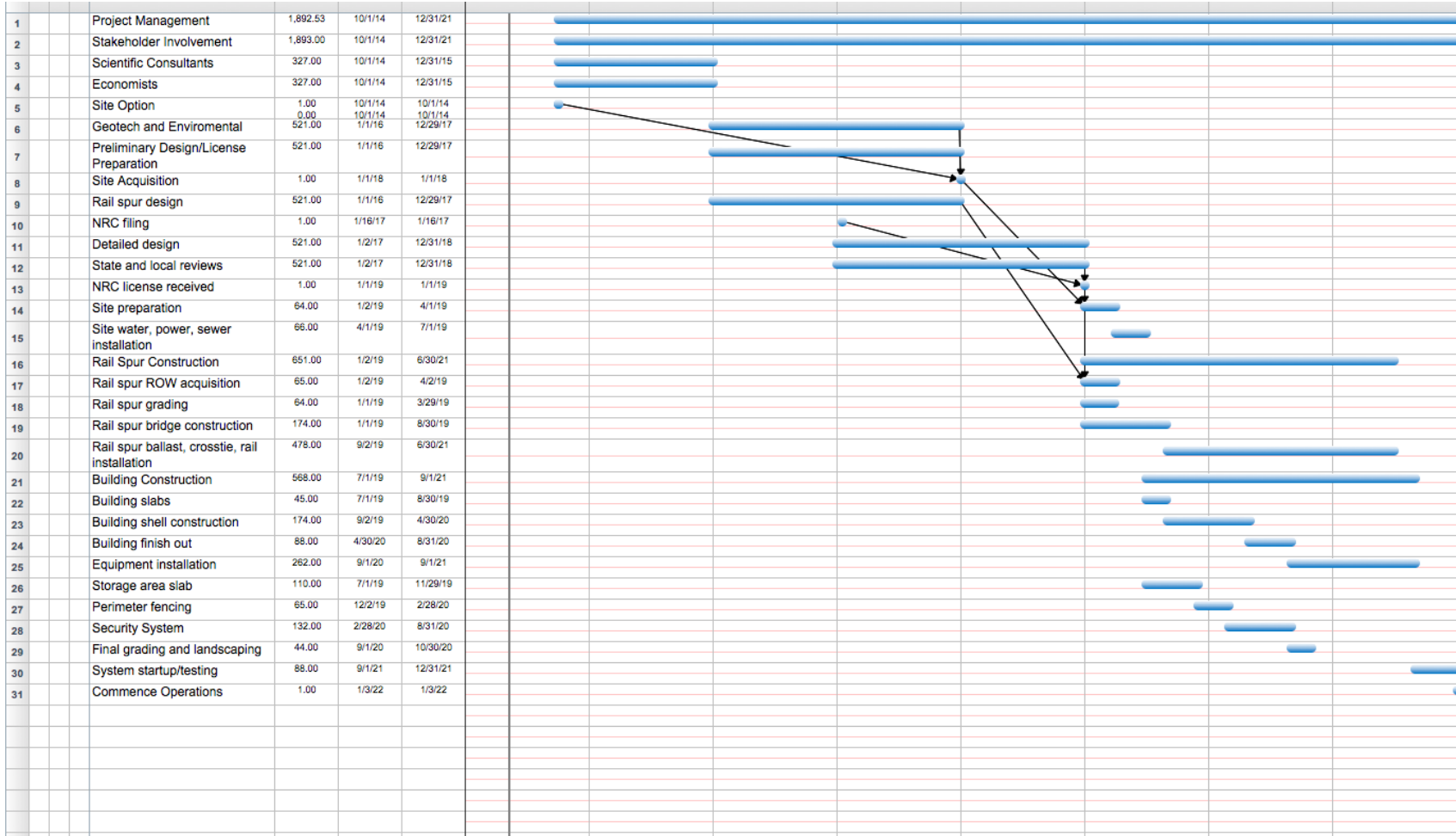
## Centralized Storage Best Option

Scenarios (153,000 MT)	Cost Range* (Billions \$2009)	Mean Cost (Billions \$2009)
Yucca Mountain (disposal)	\$91-\$117	\$103
Centralized Storage (disposal)	\$23-\$81	\$47
On-site Storage (disposal)	\$70-\$147	\$101
On-Site (500 years-no disposal)	\$84-\$275	\$139
*Source: GAO, adjusted for default costs		

## Our Proposal:

- **Consolidate interim storage of all SNF on lands owned by the State of Texas**
- **Establish a public/private partnership to manage the facility**
  - Performance based contracts
  - Public transparency and accountability
  - Public safety, security and cost-based standards
- **Assure long-term, consistent funding to meet requirements**
  - Enforceable contracts with the federal government for design, construction, and operation
- **Defined pathway to final disposition**
  - Clear, upfront authority to take steps required for disposition, subject to NRC oversight
  - Retain flexibility to change course in response to science, public consensus and changing needs

# Project Plan



# Sources of Funds

Funding	Totals	%	2014	2015	2016	2017	2018	2019	2020	2021
Carryover surplus (deficit)	\$ 43,647,115		\$ -	\$ -	\$ 42,088	\$ -	\$ 11,904,662	\$ 16,080,492	\$ 15,619,873	\$ -
Equity	\$ 32,442,499	10.0%	\$ 1,727,700	\$ -	\$ 10,928,829	\$ 19,785,970	\$ -	\$ -	\$ -	\$ -
Grants	\$ 79,192,311	24.4%	\$ -	\$ 1,727,700	\$ 1,685,613	\$ 12,656,529	\$ 20,537,836	\$ 16,362,007	\$ 16,822,626	\$ 9,400,000
Host Contract Revenue	\$ -	0.0%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt	\$ 212,790,179	65.6%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 54,142,821	\$ 158,647,358
<b>Total Required</b>	<b>\$ 324,424,989</b>	<b>100.0%</b>	<b>\$ 1,727,700</b>	<b>\$ 1,685,613</b>	<b>\$ 12,656,529</b>	<b>\$ 20,537,836</b>	<b>\$ 16,362,007</b>	<b>\$ 16,822,626</b>	<b>\$ 86,585,320</b>	<b>\$ 168,047,358</b>
Surplus (deficit)			\$ -	\$ 42,088	\$ -	\$ 11,904,662	\$ 16,080,492	\$ 15,619,873	\$ -	\$ -

# Uses of Funds through NTP

Budget Item

		Overnight Cost	Inflation Adj						
<b>First Stage</b>									
Project Management		\$ 1,000,000	\$ 1,012,500	\$ 500,000	\$ 512,500				
Stakeholder Involvement		\$ 1,130,000	\$ 1,144,125	\$ 565,000	\$ 579,125				
Scientific consultants		\$ 200,000	\$ 202,500	\$ 100,000	\$ 102,500				
Economists		\$ 200,000	\$ 202,500	\$ 100,000	\$ 102,500				
Site Option		\$ 64,000	\$ 64,000	\$ 64,000					
Subtotal		\$ 2,594,000	\$ 2,625,625	\$ 1,329,000	\$ 1,296,625				
Contingency	30%	\$ 778,200	\$ 787,688	\$ 398,700	\$ 388,988				
Total First Stage		\$ 3,372,200	\$ 3,413,313	\$ 1,727,700	\$ 1,685,613				
<b>Second Stage</b>									
Pre-License Submittal									
Project Management		\$ 3,000,000	\$ 3,151,875	\$ 2,101,250	\$ 1,050,625				
Stakeholder Involvement		\$ 1,500,000	\$ 1,575,938	\$ 1,050,625	\$ 525,313				
Geotech and Enviro		\$ 2,000,000	\$ 2,101,250	\$ 1,400,833	\$ 700,417				
Prelim Design, License Prep		\$ 7,400,000	\$ 7,774,625	\$ 5,183,083	\$ 2,591,542				
Site Acquisition		\$ 6,400,000	\$ 6,892,100		\$ 6,892,100				
Subtotal		\$ 20,300,000	\$ 21,495,788	\$ 9,735,792	\$ 11,759,996				
Contingency	30%	\$ 6,090,000	\$ 6,448,736	\$ 2,920,738	\$ 3,527,999				
Totals		\$ 26,390,000	\$ 27,944,524	\$ 12,656,529	\$ 15,287,995				
License Application Review									
Project Management		\$ 2,500,000	\$ 2,432,684		\$ 1,009,585	\$ 1,060,695	\$ 362,404		
Stakeholder Involvement		\$ 1,500,000	\$ 1,661,528		\$ 201,917	\$ 605,751	\$ 636,417	\$ 217,443	
NRC fees		\$ 16,000,000	\$ 17,722,961		\$ 2,153,781	\$ 6,461,344	\$ 6,788,449	\$ 2,319,387	
Technical and legal support		\$ 6,000,000	\$ 6,646,110		\$ 807,668	\$ 2,423,004	\$ 2,545,668	\$ 869,770	
Detailed design		\$ 4,500,000	\$ 4,984,583		\$ 605,751	\$ 1,817,253	\$ 1,909,251	\$ 652,328	
State and local reviews		\$ 500,000	\$ 538,445		\$ 269,223	\$ 269,223			
Subtotal		\$ 31,000,000	\$ 33,986,312		\$ 4,038,340	\$ 12,586,159	\$ 12,940,481	\$ 4,421,331	
Contingency	30%	\$ 9,300,000	\$ 10,195,893		\$ 1,211,502	\$ 3,775,848	\$ 3,882,144	\$ 1,326,399	
Totals		\$ 40,300,000	\$ 44,182,205		\$ 5,249,842	\$ 16,362,007	\$ 16,822,626	\$ 5,747,731	
Initial Construction/Preop									
Project Management		\$ 1,400,000	\$ 1,649,664				\$ 579,847	\$ 1,069,817	
Stakeholder Involvement		\$ 1,500,000	\$ 1,767,497				\$ 621,264	\$ 1,146,233	
Technical and legal support		\$ 2,323,000	\$ 2,737,264				\$ 962,131	\$ 1,775,132	
System startup/testing		\$ 1,700,000	\$ 2,003,163				\$ 704,100	\$ 1,299,064	
Subtotal		\$ 6,923,000	\$ 8,157,588				\$ 2,867,342	\$ 5,290,246	
Contingency	30%	\$ 2,076,900	\$ 2,447,276				\$ 860,203	\$ 1,587,074	
Totals		\$ 8,999,900	\$ 10,604,864				\$ 3,727,545	\$ 6,877,320	
Total Second Stage		\$ 75,689,900	\$ 82,731,593						

## Project Risk Mitigation

Risk	Mitigation
Delay in appropriation	Raise private funds to provide reserve
Delay in lease	Begin on private lands
Delay in DOE contract	Direct contracts with dead plant society members



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