



# Present Value Discounting of Parent Company Guarantee for Decommissioning Financial Assurance

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## Overview



- Some thoughts on the parent company guarantee (PCG)
- The regulations
- Three license transfer cases
- Comments & responses
- Costs & risks
- Conditions to achieve equivalency
- Summary

## Thoughts on the PCG



- PCG an agreement between parent and subsidiary-licensee
- Should be a win-win approach

Licensee	Public
• Lowest cost method	• Lower risk of future shortfall
• Demonstrate stewardship	• Enhanced confidence
• Useful for temporary needs	• Assurance adds to licensee funds
• No third party involvement	
• Unlikely to need performance	

## Thoughts on the PCG (continued)



Benefits	Risks
• No financing cost	• More vulnerable in bankruptcy
• Can be issued quickly	• Common mode risk
• Useful for temporary needs	• No funds for security
• Can adjust deposit timing	• Incentive to avoid deposits
	• Delays in decommissioning

- Do "indirect costs" negate the benefits?

## Thoughts on the PCG (continued)



- Comments solicited
  - Are there additional benefits or risks to using the PCG?

## The Regulations



- History
  - 1981 EPA faced same question on PCG
    - Did not allow PCG buildup over time
  - 1988 NRC allowed PCG for all licensees except electric utility reactors
    - External sinking fund required annual deposits
  - 1998 power reactors allowed to use PCG
    - Low-cost flexible method in view of deregulation
    - Deposits not required for external sinking fund or prepayment trust fund

## The Regulations (continued)



- PCG requirements:
  - Tangible net worth 6 times face amount
    - \$10 million minimum
    - New rule allows intangible net worth
  - Assets worth 6 times face amount
  - 90% of assets in United States
  - Investment grade credit rating
  - Annual passing of financial test
  - Written PCG agreement

## The Regulations (continued)



- Why does the PCG need to be full-value?
  - § 50.75(b)(1) amount may be more but not less than specified by § 50.75(c)(1) and (2)
  - § 50.75(b)(3) amount must be covered by financial assurance methods of § 50.75(e)
  - § 50.75(e)(1)(iii)(B) has no provision for discounting a PCG

## The Regulations (continued)



- How can a PCG be discounted?
  - § 50.12 Exemption
    - Special circumstances required to grant
  - § 50.75(e)(1)(vi) Other mechanisms
    - NRC evaluation of special circumstances of submittal
    - Equivalent to methods of § 50.75(e)(1)(i) through (v)
  - “Special circumstances” overlap
  - Rulemaking
- Equivalency adds requirement above simple exemption

## The Regulations (continued)



- Comments solicited
  - What might constitute a “special circumstance” that should be considered in evaluating a discounted PCG for financial assurance?
  - What factors should be considered in determining whether the discounted PCG is equivalent to the methods of § 50.75(e)(1)(i) through (v)?

## The Regulations (continued)



- Comments solicited on public participation
  - Should public participation be provided for evaluations of a discounted PCG?
  - What methods should be used:
    - *Federal Register* notice?
    - Public meeting?
    - Public website announcement?

## Three License Transfer Cases



- License transfer cases offered as reason to approve discounted PCG
- Basis was § 50.75(e)(1)(iii)(B)
  - Incorrect application of regulation

## Three License Transfer Cases (continued)



- Inconsistent with the large majority of PCGs accepted by NRC
  - Parts 30, 40, 70
  - Research & test reactors
  - Other power reactors

## Three License Transfer Cases (continued)



- Inconsistent with materials guidance
  - “No credit is taken for earnings on any financial assurance mechanism (e.g., a parent company guarantee) that does not set aside actual funds as prepayment for site control and maintenance activities.” NUREG-1757, Vol.3, p. 4-29
- Not addressed in reactor guidance

## Three License Transfer Cases (continued)



- Nine Mile Point (NMP) Unit 1 license transfer illustrates error

August 2001 NMP Unit 1 License Transfer Application:

Balances at Transaction Closing	
Unit 1 Qualified Fund Balance as of 7/01/2001	\$189,200,000
Unit 1 Non-Qualified Fund Balance as of 7/01/2001	\$76,800,000
<b>Unit 1 Guarantee Amount</b>	<b><u>\$54,496,000</u></b>
Total Used for Funding Projection	\$320,496,000

- Only \$266 million was actually placed in trust fund (cash)
- Projected earnings were based on \$320 million

## Three License Transfer Cases (continued)



- Compare NMP Unit 1 Projections to Actual

Year	Year End Fund Balance	
	Feb. 2001 Transfer Application Projection	Fund Status Report Actual
<b>2001</b>	\$323,685,000	Not Available
<b>2005</b>	\$350,367,000	\$318,106,000
<b>2008</b>	\$371,812,000	\$288,106,000

- 2009 shortfall of \$45 million using 20 year license renewal period



## Three License Transfer Cases (continued)



- Comments solicited:
  - Should NRC continue to approve discounted PCGs under §50.75(e)(1)(iii)(B) as used in the license transfer cases?
  - What factors argue for or against different treatment of an earnings credit for PCGs offered by power reactors as compared to all other licensees?

## Summary Comments & Responses



NEI Comments	NRC Staff Responses
"Set aside" assets worth 6 times face amount	No requirement to set aside – only possession required
Lost use of assets as collateral for other obligations	No restriction on use of assets
Significant indirect cost: <ul style="list-style-type: none"> <li>• Reduced liquidity</li> <li>• Credit quality stress</li> <li>• Credit rating downgrade</li> </ul>	Counter-examples: <ul style="list-style-type: none"> <li>• Progress Energy (2003)</li> <li>• FPL Group (2008)</li> <li>• FirstEnergy (2008)</li> <li>• Exelon (2010) ?</li> </ul>

## Summary Comments & Responses (continued)



NEI Comments	NRC Staff Responses
Tangible net worth requirement too burdensome	Other methods have no net worth requirement
Not consistent with GAAP	Accounting standard FAS 143 does not ensure adequate funds

## Summary Comments & Responses (continued)



- Indirect cost of liquidity, credit stress or downgrade?

Parent	LOC	Parent Guarantee	NRC PCG
Progress Energy 2003	\$11 million	\$1.0 billion	\$276 million
FPL Group 2008	\$737 million	\$9.6 billion	\$93 million
First Energy 2008	\$2.1 billion	\$3.8 billion	\$80 million

- Progress reported no effect on liquidity or short-term borrowing costs; FPL had "A" credit, FirstEnergy credit upgrade

## Summary Comments & Responses (continued)



- PCG is off-balance sheet arrangement
  - Not recorded as liability
- No performance expected

Parent	Off-Balance Sheet	Performance
Progress Energy	Yes	“not likely”
FPL Group	Yes	“unlikely”
First Energy	Yes	“remote”

## Summary Comments & Responses (continued)



- Tangible net worth burden?
- New reactor example from NEI:
  - \$405 million decommissioning cost
  - Assume shutdown after 40 years, DECON complete in 7 years
  - 2% discount yields \$171 million face amount for discounted PCG

## Summary Comments & Responses (continued)



- If goal is to reduce net worth requirement, alternatives are more effective

Financial Assurance Method	Parent Company Tangible Net Worth Requirement
Full-value PCG	\$2,400,000,000
Discounted PCG, if allowed	\$1,000,000,000
Prepayment method	\$0
Surety method fund	\$0
Utility external sinking fund	\$0
Contractual obligation	\$0

## Summary Comments & Responses (continued)



- Comments solicited:
  - How much weight should be given to minimizing parent company net worth in evaluating a request to use a discounted PCG?
  - Are there examples of a reactor licensee that experienced reduced liquidity, credit stress, or credit downrating due to a full-value PCG that could have been avoided by a discounted PCG?

## Summary Comments & Responses (continued)



- **Not consistent with GAAP?**
- GAAP and financial assurance have different goals
  - GAAP: provide cash flow information
  - Financial assurance: protect public health and safety
- Accounting standard [FAS No. 143] will not ensure adequate accumulation of funding for decommissioning
  - Only a reporting requirement, no funding required
  - Source: GAO-02-48 Nuclear Regulation, December 2001

## Summary Comments & Responses (continued)



- **Not consistent with GAAP? (continued)**
- Capital investment analysis, if used to calculate contributions to decommissioning funds, could result in financial assurance levels that are not adequate to pay for all assured obligations. (63 FR 50465, 50477)
- Purpose of financial assurance is to provide a second line of defense if the licensee's financial operations do not produce sufficient funds (63 FR 50465, 50474)

## Summary Comments & Responses (continued)



- Comments solicited regarding GAAP
  - To what extent should financial reporting requirements under GAAP be used to evaluate a request to use a discounted PCG as financial assurance for decommissioning costs?

## Costs & Risks



- Comments solicited
  - What cost savings can be realized from discounting the face amount of a PCG?
  - Are there costs of using a full-value PCG not considered in the discussion?

## Costs & Risks (continued)



- Risks
- PCG vulnerable to bankruptcy
  - Creditors may seize parent's funds
  - Partial, perhaps no recovery
  - Automatic stay
  - Potential discharge of debt
  - Potential abandonment

## Costs & Risks (continued)



- Risks
- Creditors may seize parent's funds
  - Lacks protection of trusts and third-party surety methods
- Partial recovery in bankruptcy
  - Discounted PCG lower recovery than full-value PCG
  - Lower tangible net worth provides lower safety margin

## Costs & Risks (continued)



- Risks
- Safety margin
  - Cost of decommissioning remains the same
  - Lower tangible net worth of discounted PCG yields lower ratio of net worth to cost of decommissioning
  - Lower face value of discounted PCG yields lower recovery in bankruptcy

## Costs & Risks (continued)



- Risks
- Comments solicited
  - How much weight should be placed on the vulnerabilities to bankruptcy when evaluating a discounted PCG for equivalency to other financial assurance methods?



## Costs & Risks (continued)



- **Risks**
- Incentive to delay or cease payments into trust fund
  - Discounted PCG allows longer periods of delay for a given net worth
  - In 2009, over 80% of the dollar shortfall was experienced by facilities that ceased payments into their trust funds

## Costs & Risks (continued)



- **Comments solicited**
  - How much weight should be placed on the incentive to delay or cease payments into the trust fund in evaluating a request to use a discounted PCG?

## Costs & Risks (continued)



- Comments solicited
  - Would the bankruptcy risks of the automatic stay, discharge of debt, or abandonment be expected to differ between a full-value and discounted PCG?

## Conditions to Achieve Equivalency



- What factors should be considered in determining equivalency to the financial assurance methods of § 50.75(e)(1)(i) through (v)?
  - Variation in time horizon
  - Security for discounted PCG
  - Merchant plant lack of ratepayer access
  - Other factors

## Conditions to Achieve Equivalency (continued)



- Variation of discounted PCG over time

Shortfall	NPV @ 2% for Shortfall Occurring in the Future		
	20 Years in Future	40 Years in Future	93 Years in Future
\$100,000,000	\$67,000,000	\$45,000,000	\$16,000,000

- Comments solicited
  - Should discount period be limited?
  - Should full-value be required after shutdown?

## Conditions to Achieve Equivalency (continued)



- Recall no funds or collateral secure the PCG agreement
- Comments solicited:
  - Should security be required for discounted PCG?
    - Cash reserve in escrow
    - First-lien collateral unencumbered by other liens
    - Payments to trust fund while discounted PCG use

## Conditions to Achieve Equivalency (continued)



- Merchant plants lack access to ratepayers
- Comments solicited
  - Should merchant plant use of discounted PCGs be subject to additional conditions?

## Conditions to Achieve Equivalency (continued)



- Comments solicited
  - Are there other factors that should be considered when evaluating the equivalency of a discounted PCG to the financial assurance methods of §50.75(e)(1)(i) through (v)?

## Summary



- The PCG can be a win-win method
- Regulations & guidance do not provide for a discounted PCG without evaluation
- No financing costs for PCG
- Indirect costs have not been demonstrated
- Conditions should be considered to achieve equivalent assurance

## The End



# Questions?

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