

# BSM Forecast Enhancements

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April 19, 2017, Rensselaer NY



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# Agenda

- **Introduction**
  - History
  - Objective
- **Revised Proposal**
- **Mechanics**
- **Draft Tariff Language**
- **Closing**
  - Summary
  - Next Steps

# History

Date	Event
2013	<p>In FERC docket ER13-1380 (to create the G-J locality), the Market Monitoring Unit and several other parties sought tariff revisions to address how mothballed units were treated in the capacity and energy forecast used to buyer-side mitigation determinations.</p> <p>FERC determined that such an enhancement was outside the scope of the docket but it encouraged the NYISO to work with stakeholders on the issue.</p>
Dec. 2014 – Oct. 2016	<p>The NYISO developed a precursor to this proposal with input from stakeholders at the following ICAP Working Group meetings: December 12, 2014, March 18, 2015, May 18, 2016, July 6, 2016, August 10, 2016, September 7, 2016, and October 27th, 2016.</p>
December 14, 2016	<p>The NYISO presented to and discussed the prior proposal with Business Issues Committee (“BIC”). The BIC voted on a Motion and Amended Motion relating to the approval of the NYISO’s proposal. Both Motions failed with 43.21% and 49.78% affirmative votes, respectively.</p> <p>Following the failure of the Motions, there seemed to be stakeholder consensus that the BSM forecast tariff provisions merited enhancement. Stakeholders expressed a desire that the NYISO continue its efforts and return to Stakeholders with a revised proposal.</p>
Today	<p>The NYISO returns to the ICAP Working Group with a revised proposal, developed with the extensive input of stakeholders, including both Load-side and Supplier-side caucuses.</p>

# Objective

## Today's presentation seeks to:

- introduce the NYISO's revised proposal
- explain the methodology & mechanics
- provide illustrative examples
- review draft tariff language
- solicit comments & suggestions on all of the above

# Revised Proposal

# Key Revisions

- **Enhanced categorical treatment**
  - Improved clarity by defining categories and NYISO work-flow for each
- **Simplified & streamlined numerical methodology**
  - Where possible, removed components that added disproportionate complexity relative to their substantive contributions, such as distinctions in treatment based on ‘significant capital investments’ and the allowance for alternative ‘price-based’ cost proxies
  - Clarified assumptions and information sources
- **Clarified and defined the exceptions**
  - Improved and clarified the treatment of Retired units and units at various stages of the Reliability Must Run (“RMR”) process
  - Clarified and enhanced the provisions relating to ‘publically available information’

# Mechanics

# Categorical Treatment

## Included in the Forecast

### Existing Units

- Generators and UDR projects in the most-recently published Gold Book
- Includes Forced Outage and Inactive Reserve units

### Additional Units

- Mothball, ICAP Ineligible Forced Outage (“IIFO”) & Retired units (& UDRs in similar conditions)
- Must have CRIS\*
- Must either:
  - a) show positive indicators of repair
  - b) Have an NPV > \$0 in the ‘inclusion test’

## Excluded from the Forecast

### Excluded Units

- Transferred CRIS\*
- Expired CRIS\*
- Units having submitted a Generation Deactivation Notice, provided they do not meet (a) or (b)
- Mothball, IIFO, and Retired units that do not meet (a) or (b)

\* ERIS only units are captured for net E&AS



# NPV ‘Inclusion’ Test

The inclusion/exclusion of some units will depend on the proposed “Net Present Value Analysis”

- This analysis will utilize the same data as used in Physical Withholding analysis, which is collected as part of the RMR process
- It will evaluate whether an investment in a unit that could return to service would have a positive Net Present Value
  - ✓ If the  $NPV > \$0$  the unit will be included. Otherwise, it will be excluded.

# NPV ‘Inclusion’ Test *(continued)*

## Key features and assumptions of the Net Present Value Analysis include:

- The analysis will consider the entry of new Class Year projects, but will afford the returning unit the opportunity to recover some (or all) of its investment costs ahead of the new Class Year projects’ entry
- Units that return will remain in service for as long as they continue to recover their Going Forward Costs (“GFCs”)
- Units that had a Catastrophic Failure, and some Retired units (those that have been dismantled or have been rendered permanently inoperable,) will not be considered

# Exceptions

## Existing Units that submitted a Generation Deactivation Notice

- Included if the NYISO has not yet completed its Generation Deactivation Assessment
- Included (for the length of the Need) if the NYISO has found a Generator Deactivation Reliability Need but hasn't yet identified a solution
- Can be included beyond the Need if they pass the inclusion test

## Long-term Partial Derates

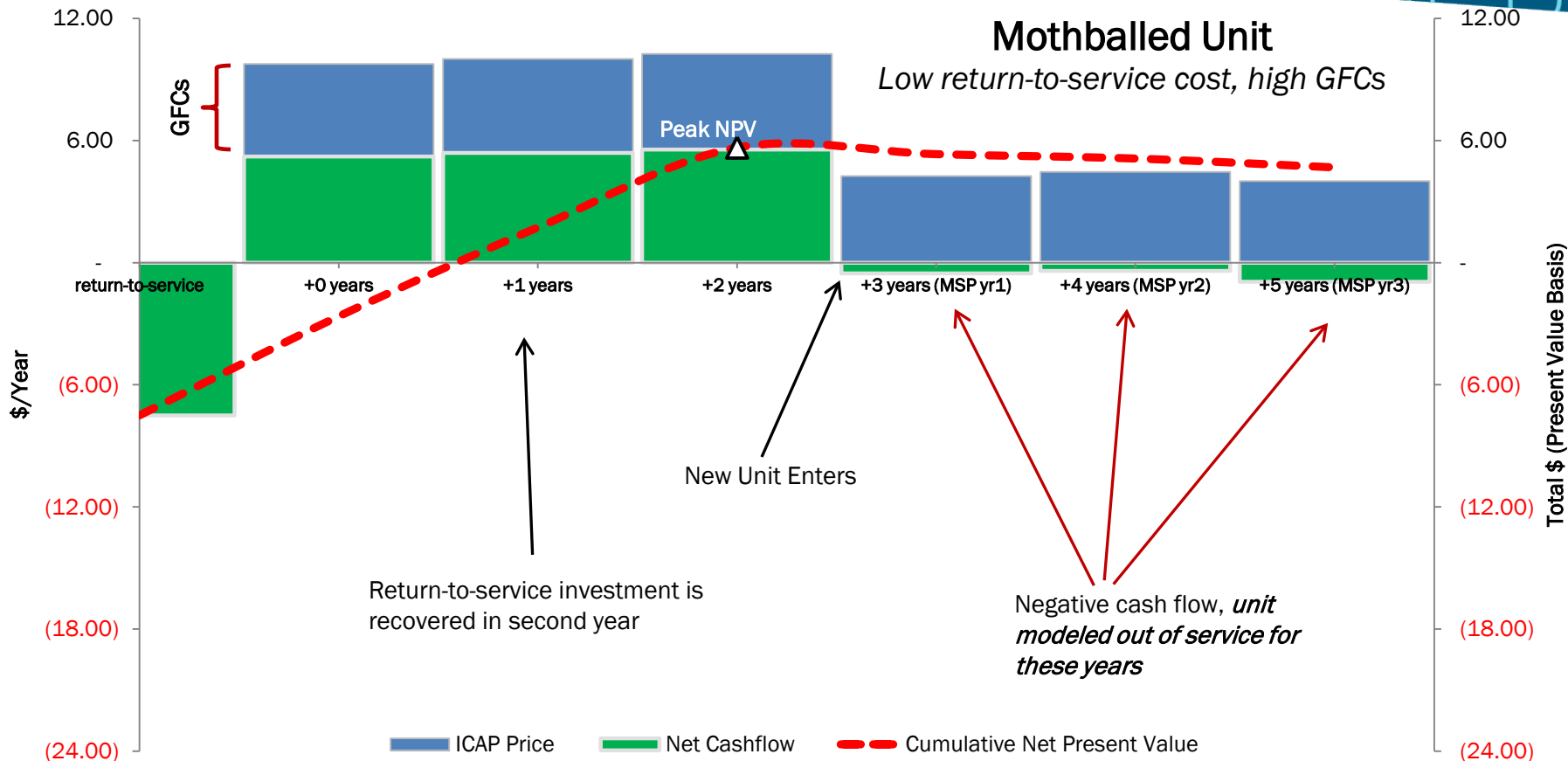
- May be evaluated under the NPV provisions to see if a repair is economic and likely

## Public Information

- The NYISO may reflect some types of reliable public information in its forecast, regardless of how a unit would have otherwise been treated
- There are additional NYISO postings associated with this provision

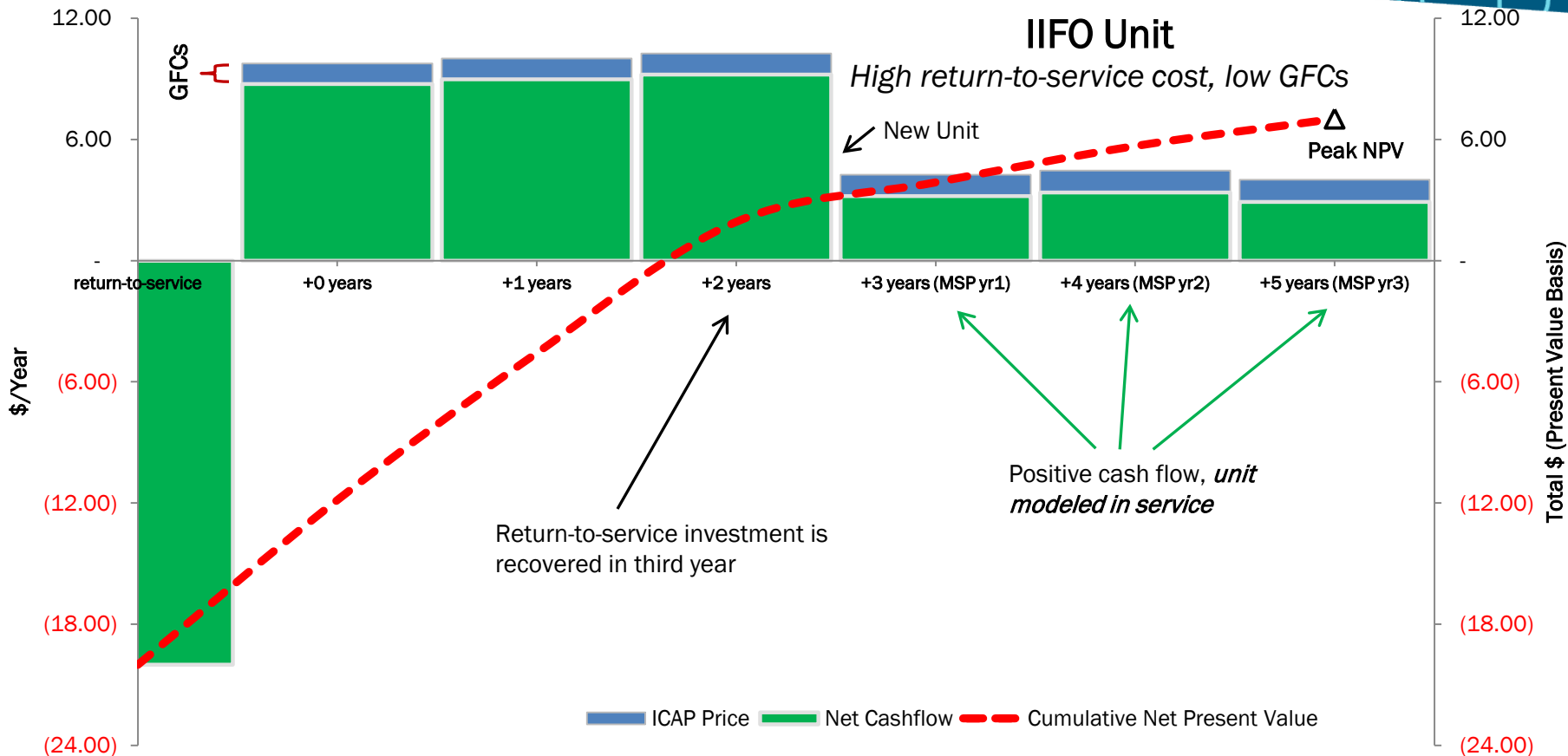
# Example # 1

- *Mothballed unit*
- *Low return-to-service costs and relatively high Going Forward Costs*
- *No other units being evaluated for return-to-service*



# Example # 2

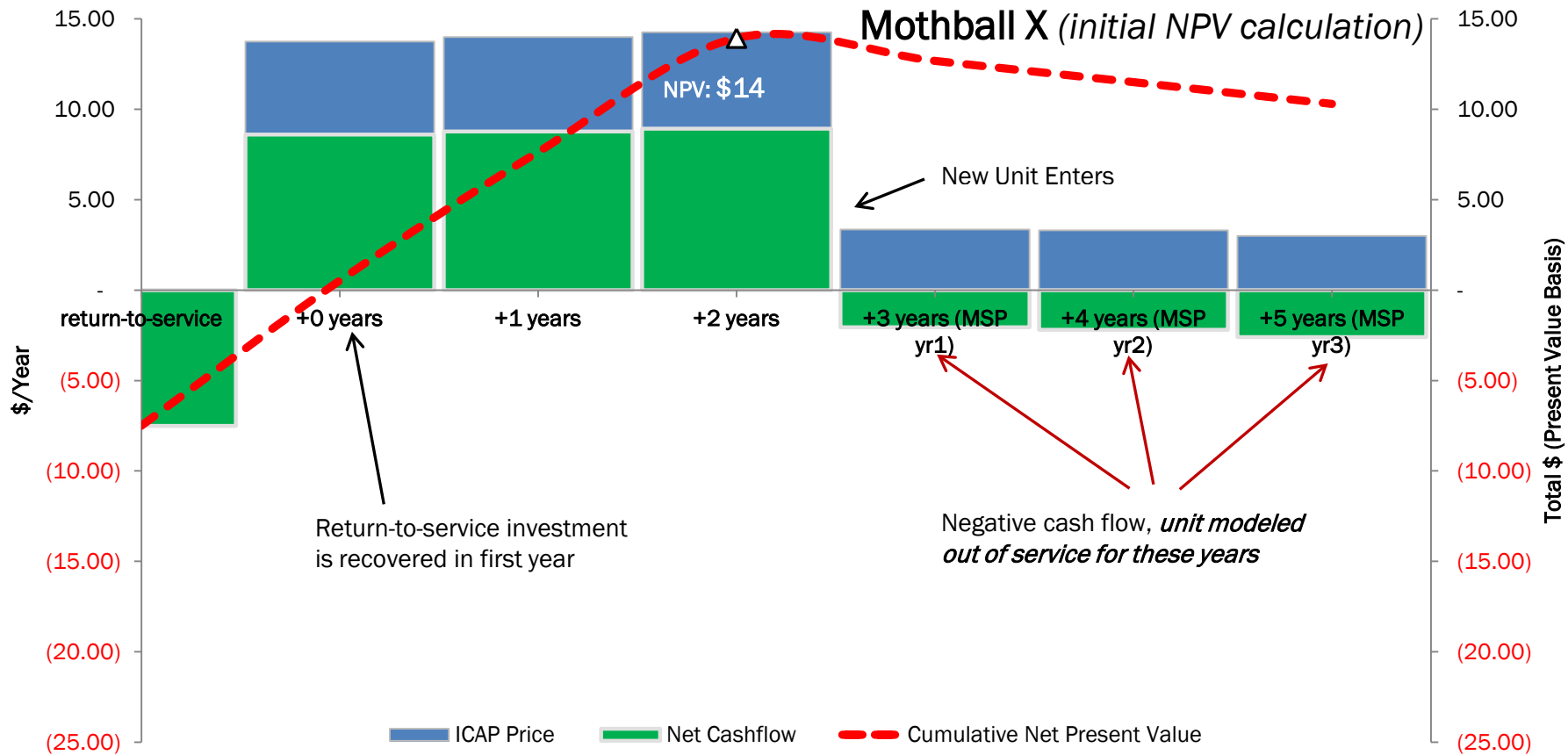
- *ICAP Ineligible Forced Outage*
- *High return-to-service costs and relatively low Going Forward Costs*
- *No other units being evaluated for return-to-service*

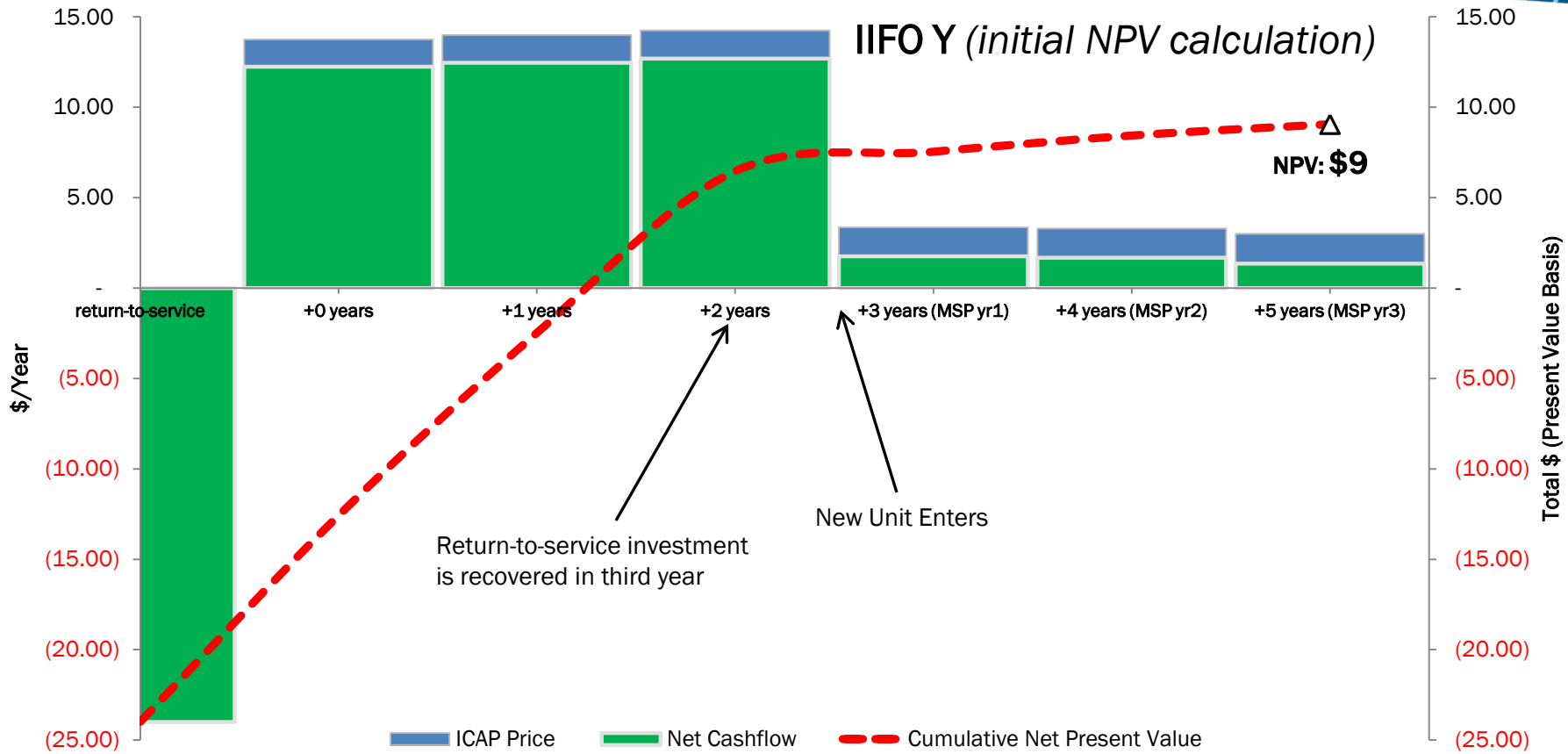


# Example # 3

- *2 units, Mothball X and IIFO Y*
- *First evaluate the NPV of each in isolation*
- *Next, assume the one with the higher NPV is in operation and calculate the second one's NPV*

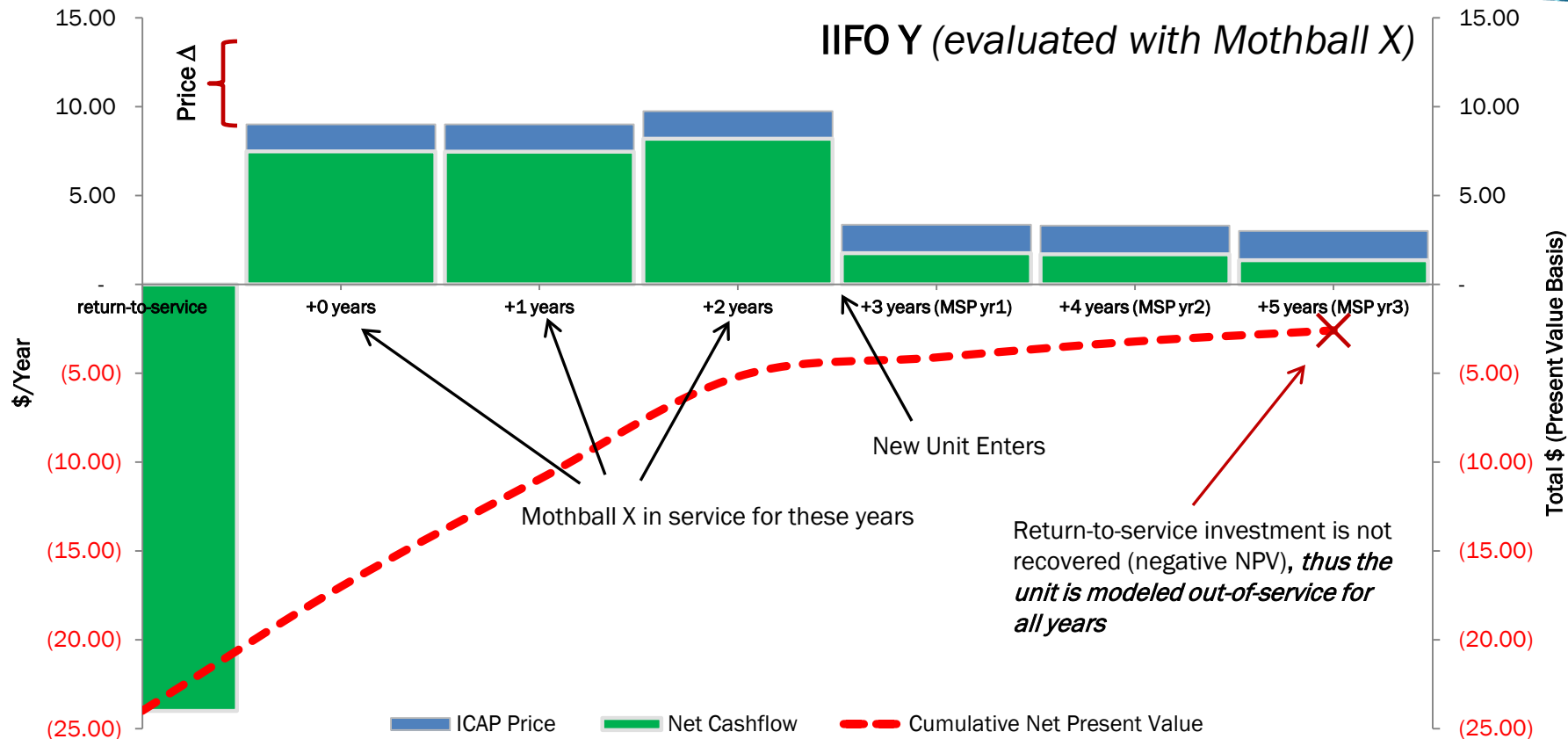






## **Example 3** *(continued)*

- **Mothball X has a higher NPV (\$14) than IIFO Y (\$9)**
- **Next, IIFO Y's NPV is recalculated with Mothball X assumed in operation for years 1-3**



# Draft Tariff Language

# Draft Tariff – New Language

- 23.4.5.7.15, and 15.1-15.3 Introduction
  - Introduction, “positive indicator,” “demonstrating with reasonable certainty,” and general rules for BSM Forecast assumptions
- 23.4.5.7.15.4 Existing Units
- 23.4.5.7.15.5 Additional Units
- 23.4.5.7.15.6 Excluded Units
- 23.4.5.7.15.7 Exceptions
- 23.4.5.7.15.8 Net Present Value Analysis
- Dispersed across 23.4.5.7 – updates to cross-references and removals of replaced language

# Next Steps

- Illustrative Examples forthcoming – to be posted
- Business Issues Committee

# Feedback?

- The NYISO welcomes additional suggestions and feedback
- Email additional feedback to: [deckels@nyiso.com](mailto:deckels@nyiso.com) and [lseirup@nyiso.com](mailto:lseirup@nyiso.com)



# Questions?

We are here to help. Let us know if we can add anything.

# The Mission of the New York Independent System Operator, in collaboration with its stakeholders, is to serve the public interest and provide benefits to consumers by:

- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policy makers, stakeholders and investors in the power system



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