

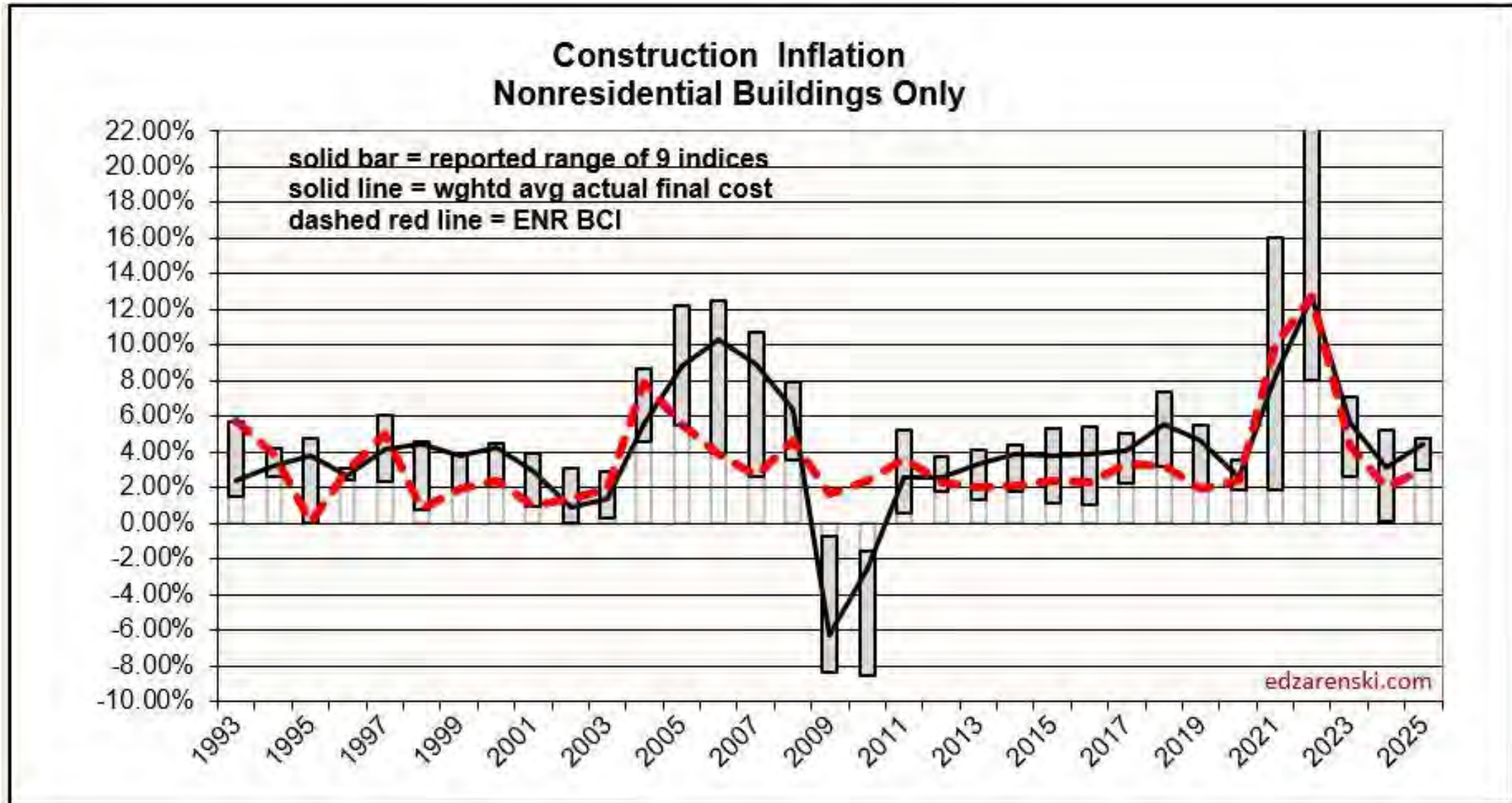
Evaluating Costs for Tariffs and Other Escalations Other

John J. Mumma, JD, CM-Lean
Executive Director, Procurement Officer
Construction & Facilities Strategic Acquisitions
University of Maryland, Baltimore

Jake Ortego, PE, CCE, CCA, CCP, CAE
Principal
Audit & Advisory
[HPM](#)

Escalation and Cost Fluctuations Are part of the industry

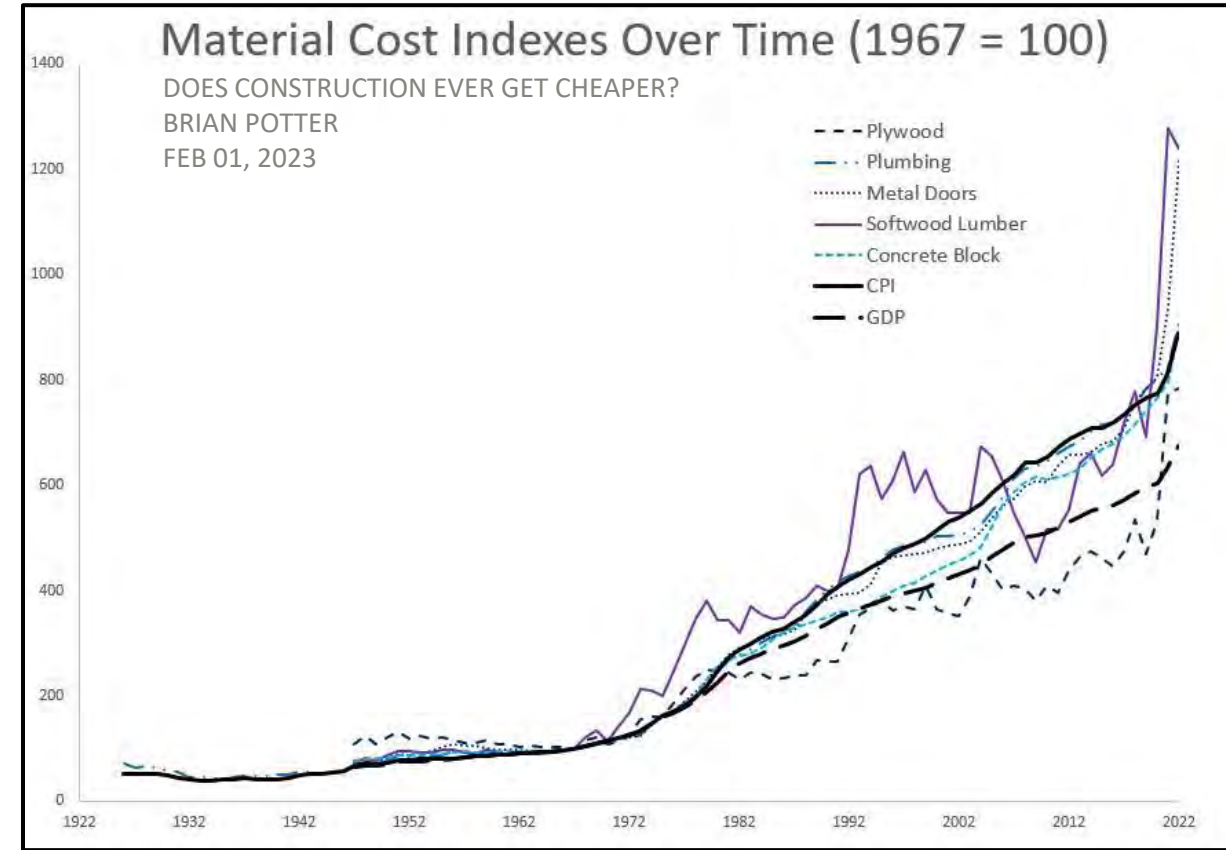
<https://edzarenski.com/2025/02/21/construction-inflation-2025-2-21-25/>



Escalation – it's not a new thing

A persistent rise in the price of specific commodities, goods, or services due to a combination of inflation, supply/demand, and other effects such as environmental and engineering changes. Factors that affect the escalation include:

- *Inflation Supply/demand*
- *Technological Changes*
- *Environmental Effects*
- *Political Effects*
- *Miscellaneous Effects*



There is a trend of both speculation and blame for escalation being the source of significant increases to costs

April 2, 2025 - “Liberation Day”

A new wrinkle in the already complicated world of construction costs

Average Tariffs on Dutiable Imports | 1900 – 2024

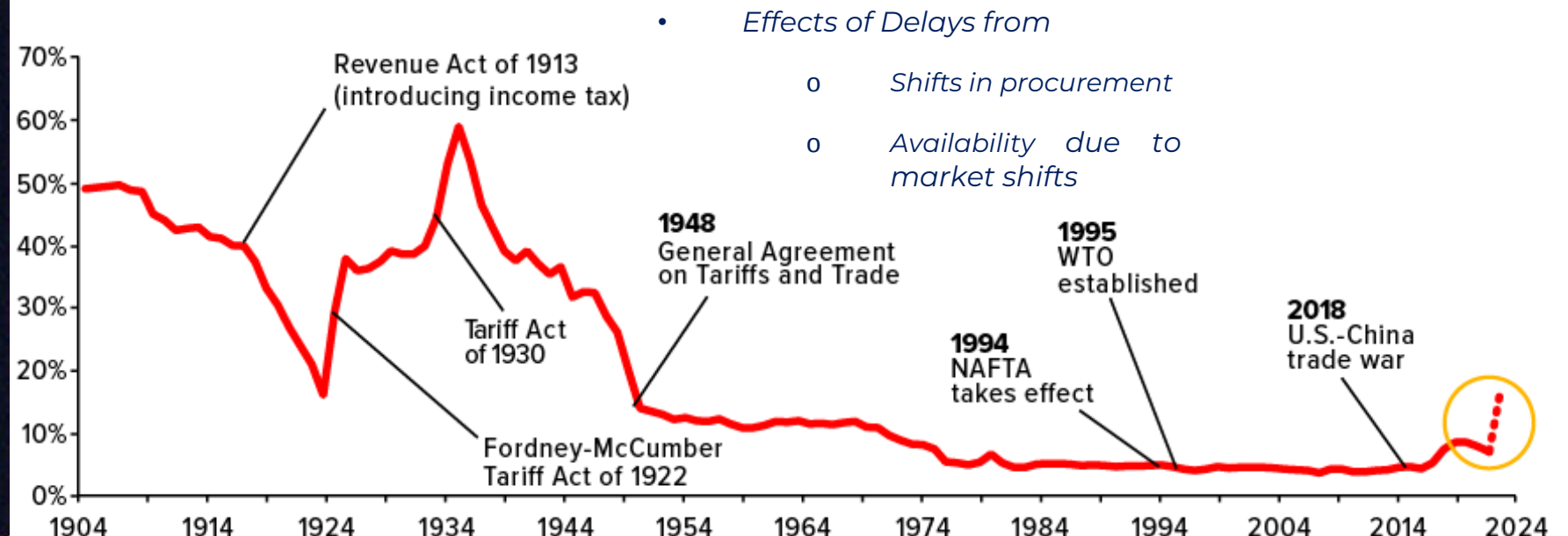
Source: PIIE, U.S. Global Investors

Reciprocal Tariffs		
Country	Tariffs Charged to the U.S.A. Including Currency Manipulation and Trade Barriers	U.S.A. Discounted Reciprocal Tariffs
China	47%	34%
European Union	39%	28%
Vietnam	38%	46%
Taiwan	44%	32%
Japan	46%	24%
India	52%	28%
South Korea	38%	23%
Thailand	72%	36%
Switzerland	41%	31%
Indonesia	44%	32%
Malaysia	47%	24%
Cambodia	97%	49%
United Kingdom	18%	18%
South Africa	48%	30%
Brazil	18%	18%
Bangladesh	74%	37%
Singapore	18%	18%
Israel	33%	17%
Philippines	34%	17%
Chile	18%	18%
Australia	18%	18%
Pakistan	38%	29%
Turkey	18%	18%
Sri Lanka	48%	44%
Colombia	18%	18%

The new tariff situation may have any or all of the cost impacts to a construction project

- *Tariff imposed when items arrive a port – Finite*
- *Escalated material costs over time as the markets adjusts and domestic assemblies materials subject to tariffs*
- *Escalated labor costs – further in the future*

[REFERENCE LINK](#) –
TRUMP TRACKER 2.0



Discrete vs Systemic Effects of Tariffs

Discrete: Tarrieff on a product that is intended to go directly to a jobsite (or staging area)

- *Documentation should be easier to relate to the product*

Systemic: Tariff on products that will be used in manufacturing, or fabrication of a larger system or assembly

- *Documentation may be more difficult to tie to assemblies if buying for multiple uses*

Tariffs are applied when the product reaches the port regardless of when it was purchased

OVER TIME, THE EFFECTS OF TARRIFFS WILL LOOK LIKE OTHER ESCALATION EVENTS

REFERENCE LINK - FORMS

DEPARTMENT OF HOMELAND SECURITY U.S. Customs and Border Protection DOW APPROVAL NO. 1651-0022 EXPIRATION DATE 03/31/2025														
ENTRY SUMMARY														
1. Filer Code/Entry Number		2. Entry Type		3. Summary Date		4. Surety Number		5. Bond Type		6. Port Code		7. Entry Date		
8. Importing Carrier				9. Mode of Transport				10. Country of Origin United States of America				11. Import Date		
12. B/L or AWB Number				13. Manufacturer ID				14. Exporting Country United States of America				15. Export Date		
16. I.T. Number			17. I.T. Date			18. Missing Docs			19. Foreign Port of Lading			20. U.S. Port of Unlading		
21. Location of Goods/G.O. Number				22. Consignee Number				23. Importer Number			24. Reference Number			
25. Ultimate Consignee Name (Last, First, M.I.) and Address								26. Importer of Record Name (Last, First, M.I.) and Address						
Street								Street						
City State Zip								City State Zip						
27. Line No.	28. Description of Merchandise							32. A. Entered Value B. CHGS C. Relationship		33. A. HTSUS Rate B. AD/CVD Rate C. IRC Rate D. Visa Number		34. Duty and IR Tax Dollars Cents		
	29. A. HTSUS No. B. AD/CVD No.		30. A. Gross Weight B. Manifest Qty.		31. Net Quantity in HTSUS Units									
Other Fee Summary (for Block 39)				35. Total Entered Value				CBP USE ONLY				TOTALS		
				\$				A. LIQ Code		B. Ascertained Duty		37. Duty		
				Total Other Fees				REASON CODE		C. Ascertained Tax		38. Tax		
				\$						D. Ascertained Other		39. Other		
36. Declaration of Importer of Record (Owner or Purchaser) or Authorized Agent										E. Ascertained Total		40. Total		
I declare that I am the ☐ Importer of record and that the actual owner, purchaser, or consignee for CBP purposes is as shown above, OR ☐ owner or purchaser or agent thereof. I further declare that the merchandise ☐ was obtained pursuant to a purchase or agreement to purchase and the statements in the invoices as to value or price are true, OR ☐ was not obtained pursuant to a purchase or agreement to purchase and the statements in the invoices as to value or price are true to the best of my knowledge and belief. I also declare that the statements in the documents herein filed fully disclose to the best of my knowledge and belief the true prices, values, quantities, rebates, drawbacks, fees, commissions, and royalties and are true and correct, and that all goods or services provided to the seller of the merchandise either free or at reduced cost are fully disclosed.														
I will immediately furnish to the appropriate CBP officer any information showing a different statement of facts.														
41. Declarant Name (Last, First, M.I.)				Title				Signature				Date		
42. Broker/Filer Information Name (Last, First, M.I.) and Phone Number								43. Broker/Importer File Number						

Who is responsible for Tariff Costs?



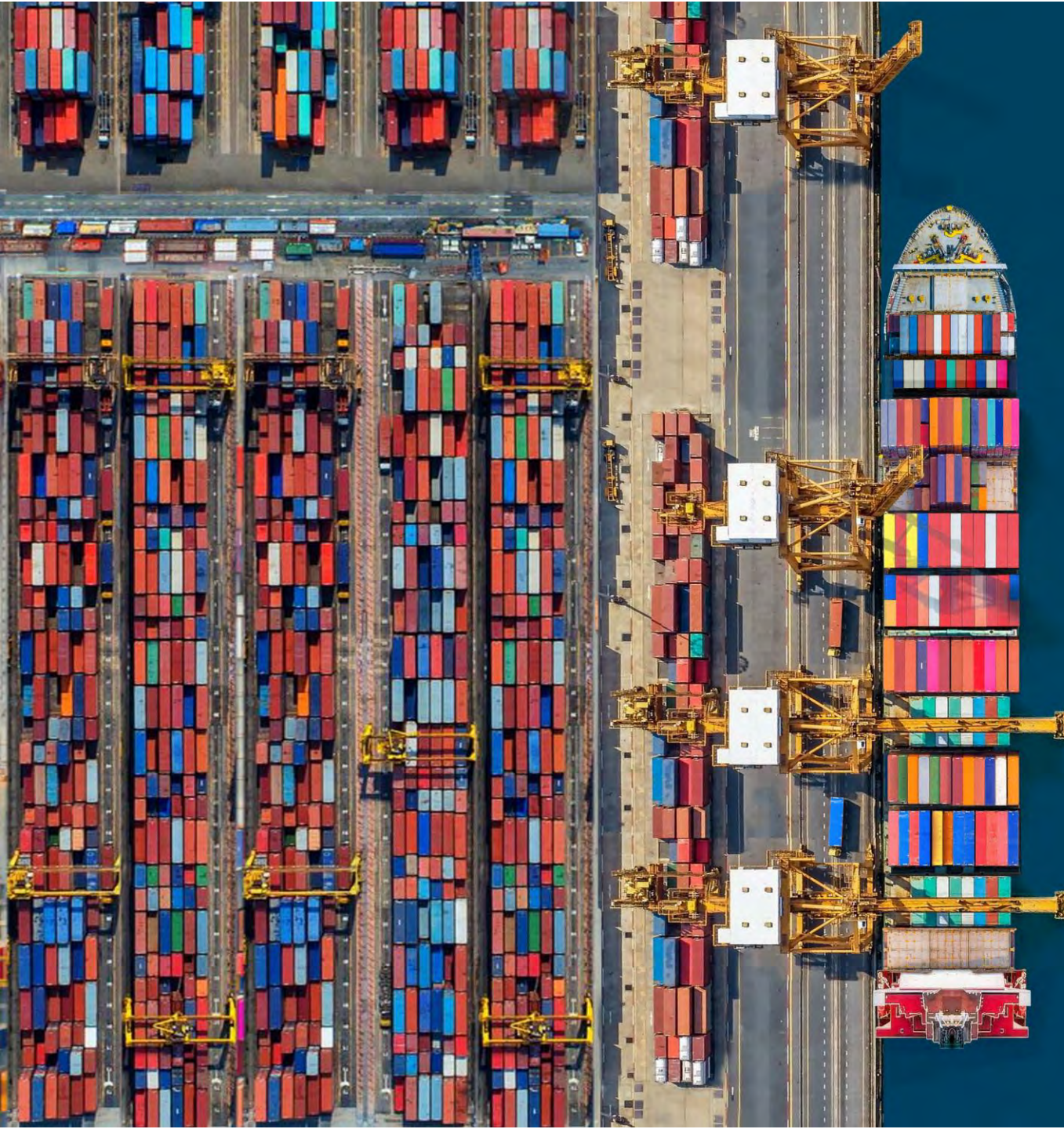
In most cases, the owner will be responsible for the tariffs if the contract was signed prior to the tariffs

Possible exception: a delay that can be attributed to the supplier or subcontractor under the primary constructor causing a product to incur a tariff.

Contracts signed after the known Tariff's may be incorporated into the contract

§ 3.6 Taxes

The Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.



**Tariffs are
incurred when a
material arrives
at port regardless
of when it was
purchased**

*Easier to define for equipment
or fully assembled products*



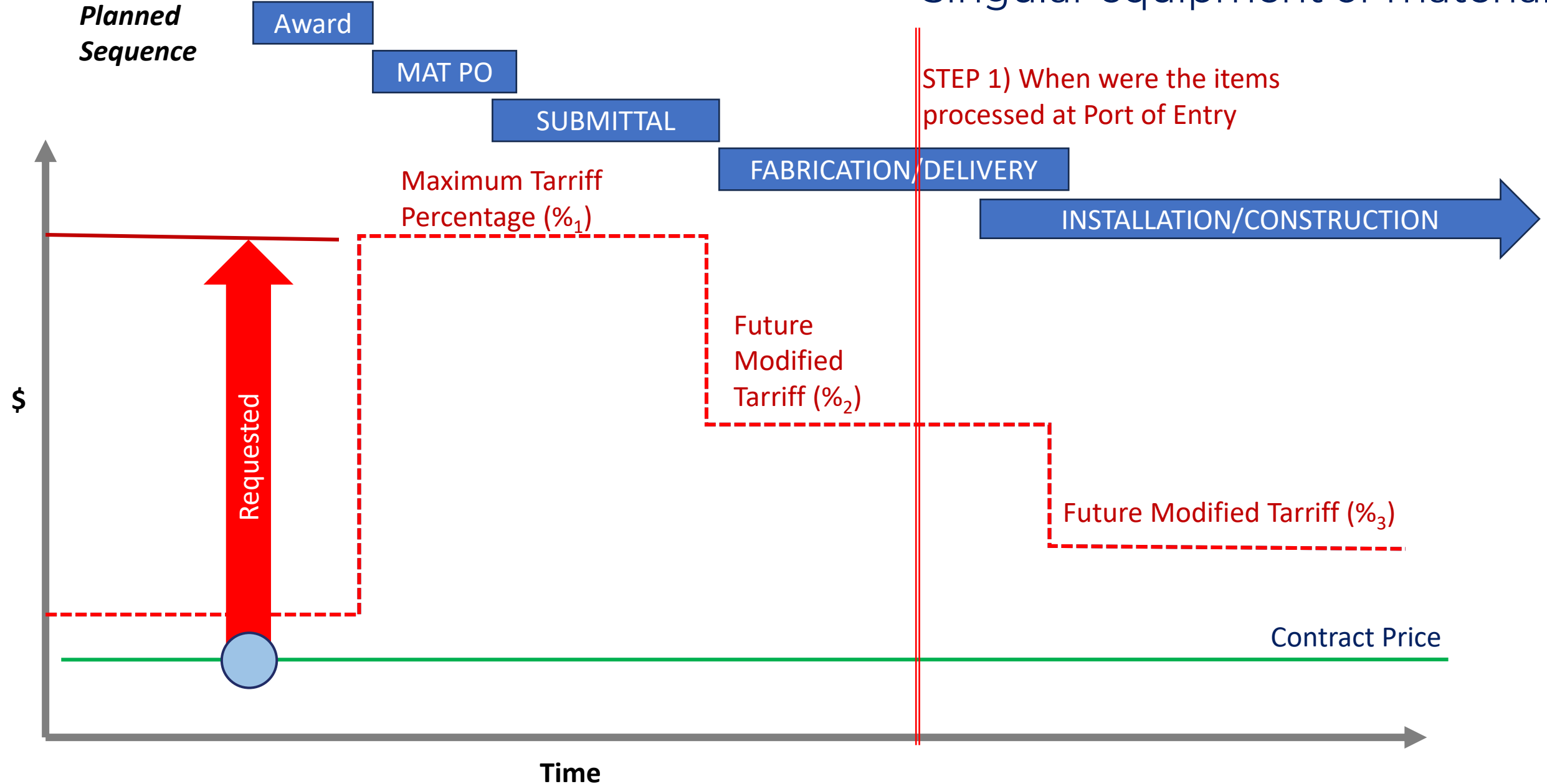
**Tariffed material used for product
assembled domestically will behave in a
manner similar to other spikes and
market disruptions**

*A tariff cost will be much harder to explicitly relate to
the project.*

Therefore, we must evaluate like other escalation

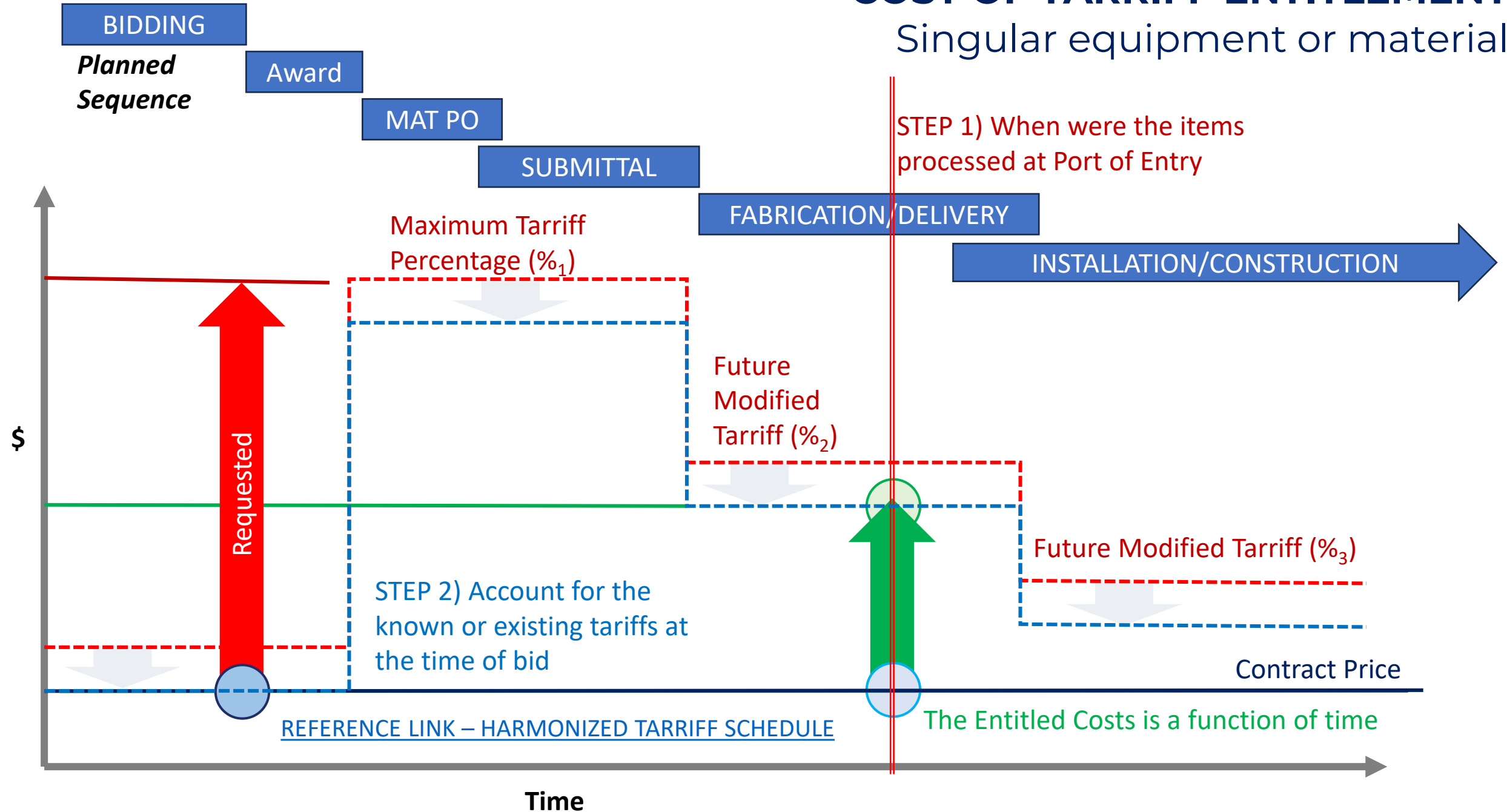
COST OF TARRIFF ENTITLEMENT

Singular equipment or material



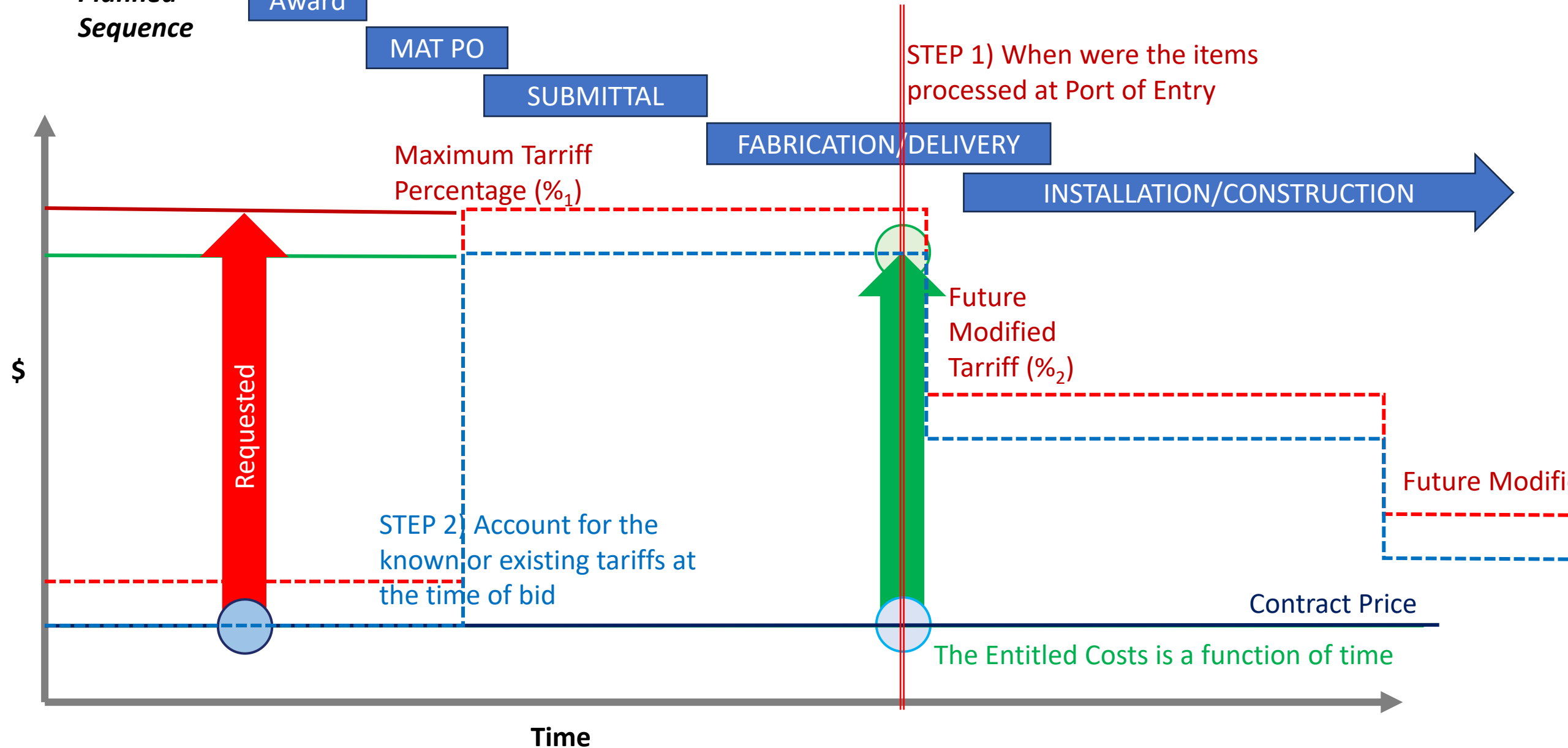
Singular equipment or material

INSTALLATION/CONSTRUCTION



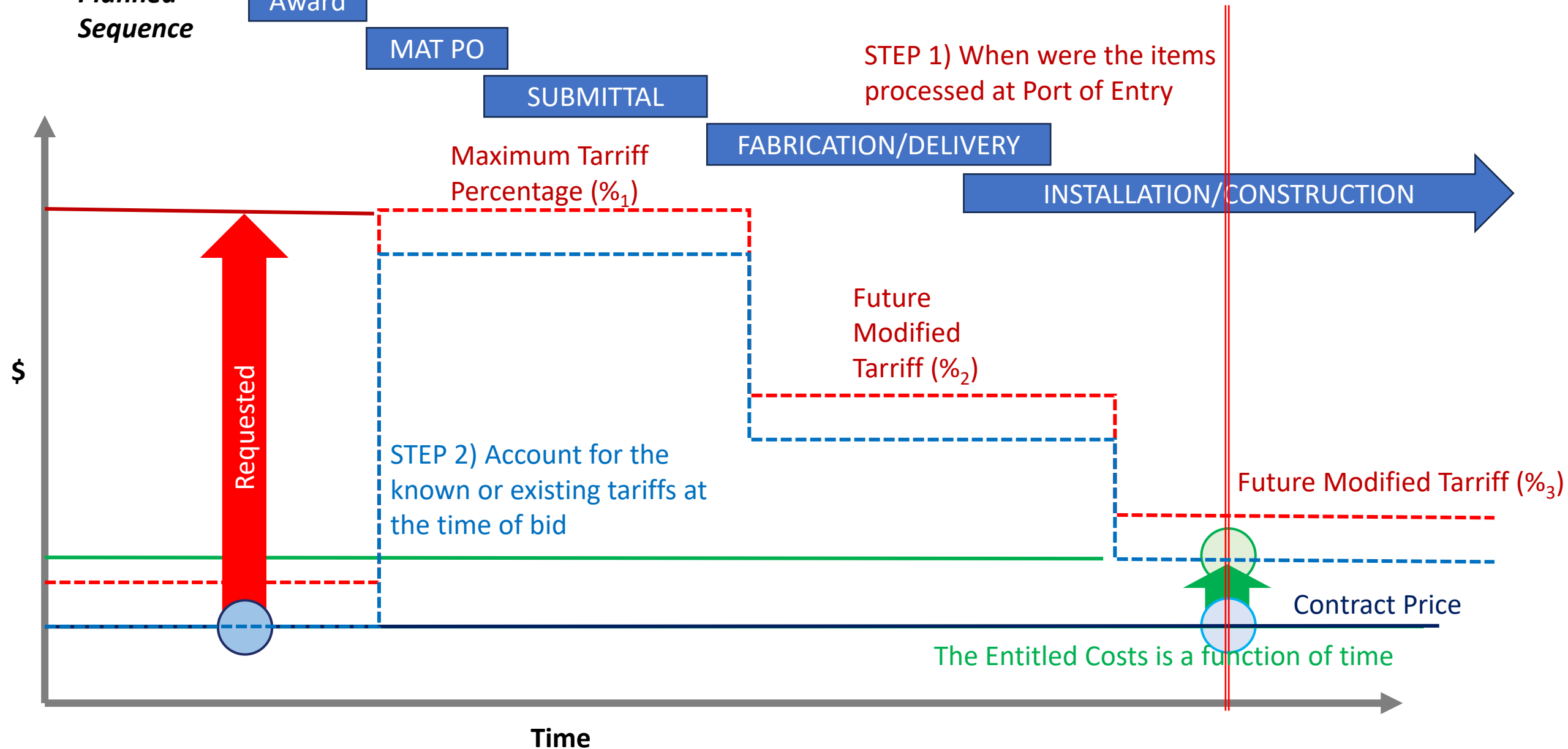
COST OF TARRIFF ENTITLEMENT

Singular equipment or material



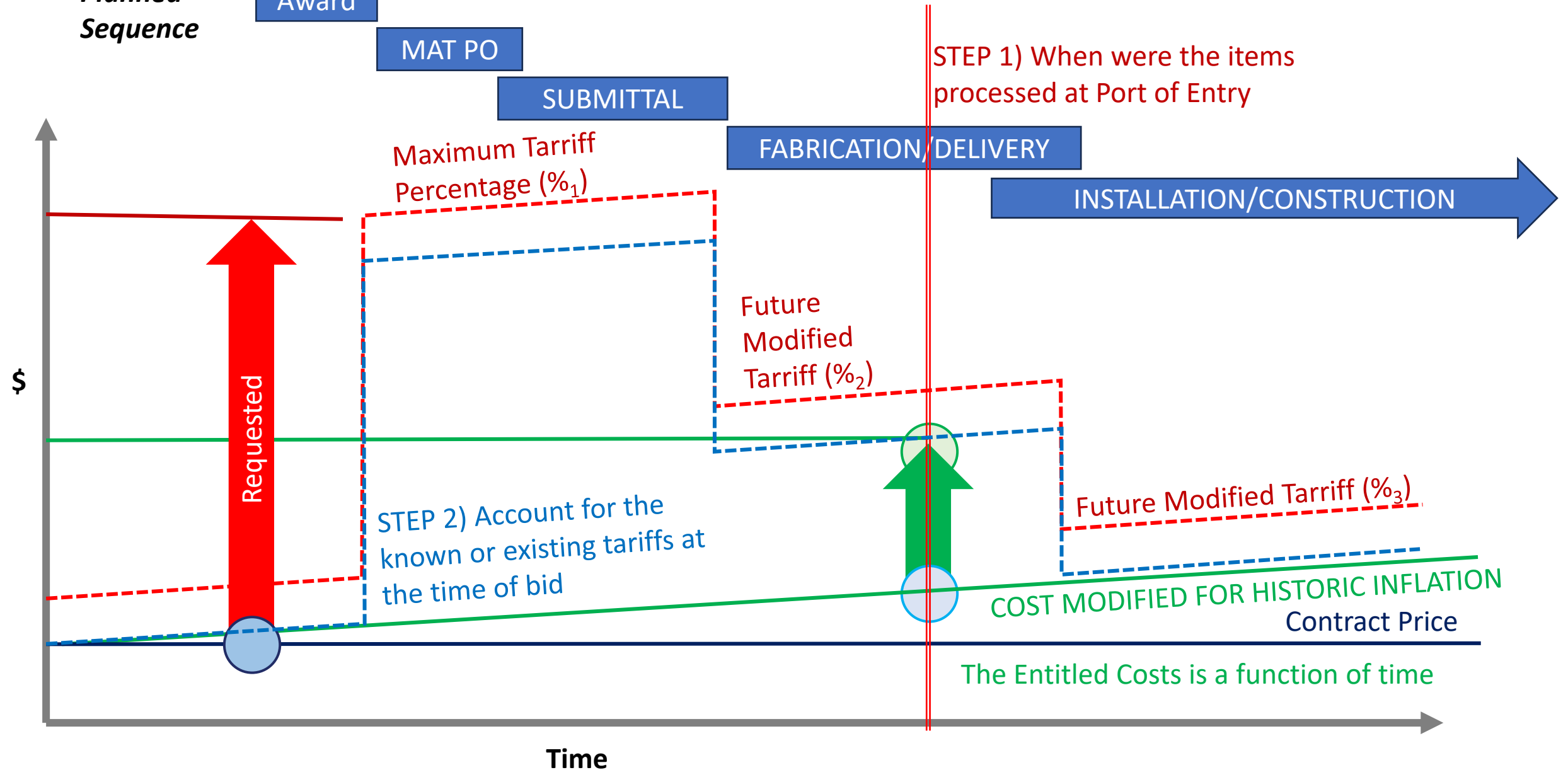
COST OF TARRIFF ENTITLEMENT

Singular equipment or material



COST OF TARRIFF ENTITLEMENT

Modify for Inflation

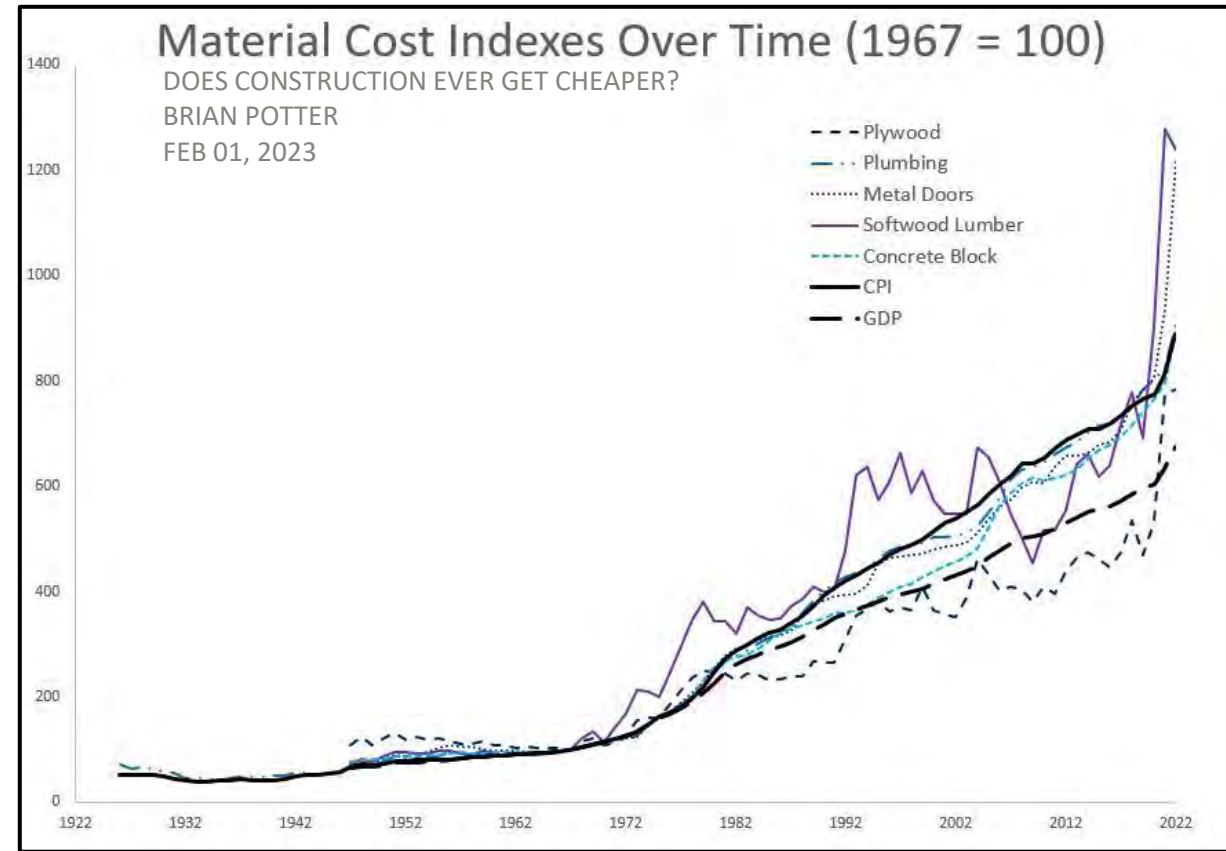


WHY?

Tariffs are one possible cause for escalation

Let's revisit an earlier slide inflation over time

Tariffs, resource shortages and supply chain interruptions all overlay the long term historic inflation that is built into economics over time



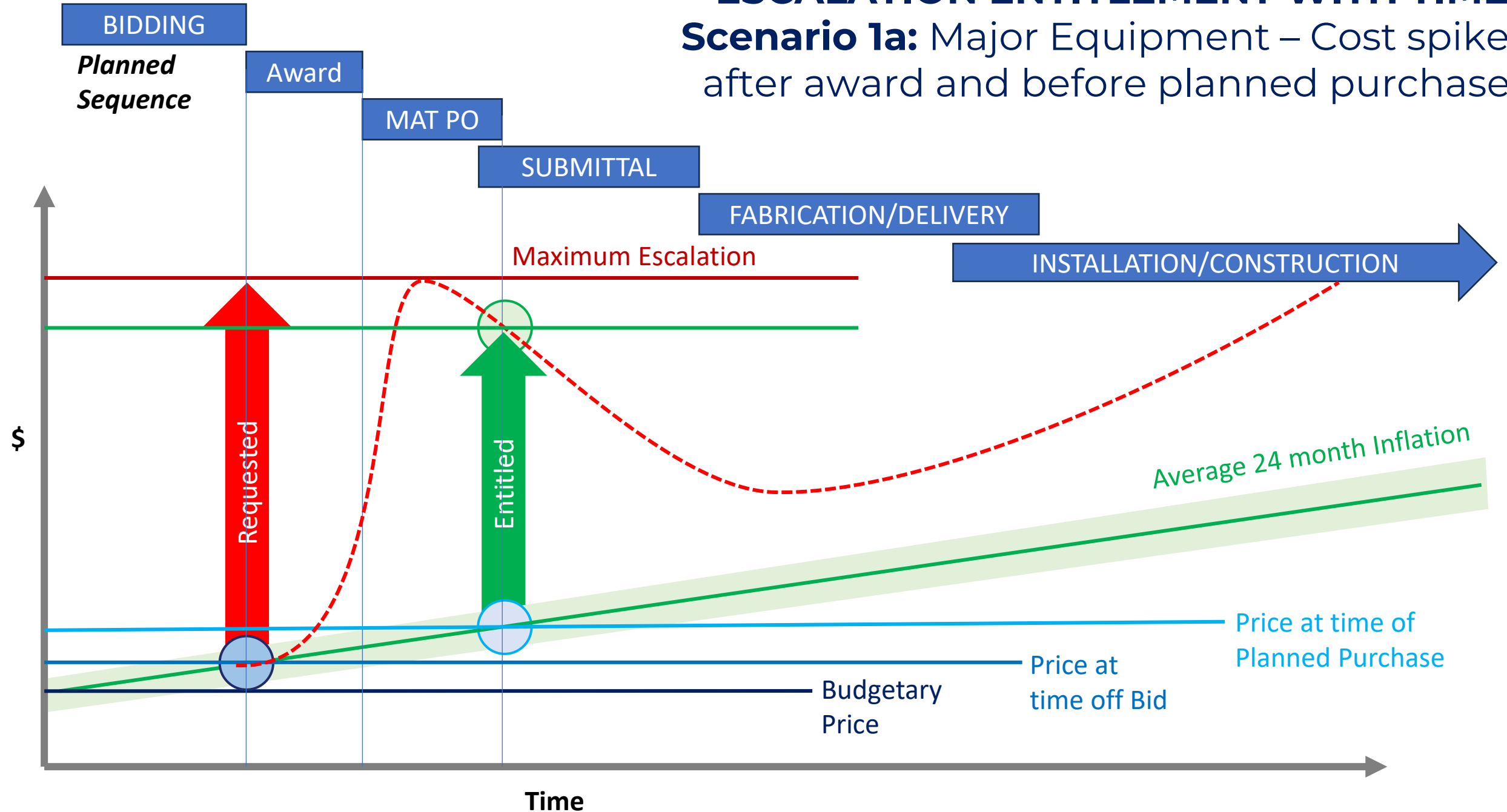
Consider the Following:

- Costs are bid to anticipate to the end of the project assuming the market is behaving “normally.”
- Escalation requests only exists if the market is disrupted
- Entitlement to escalation should consider the schedule that the bid was based upon



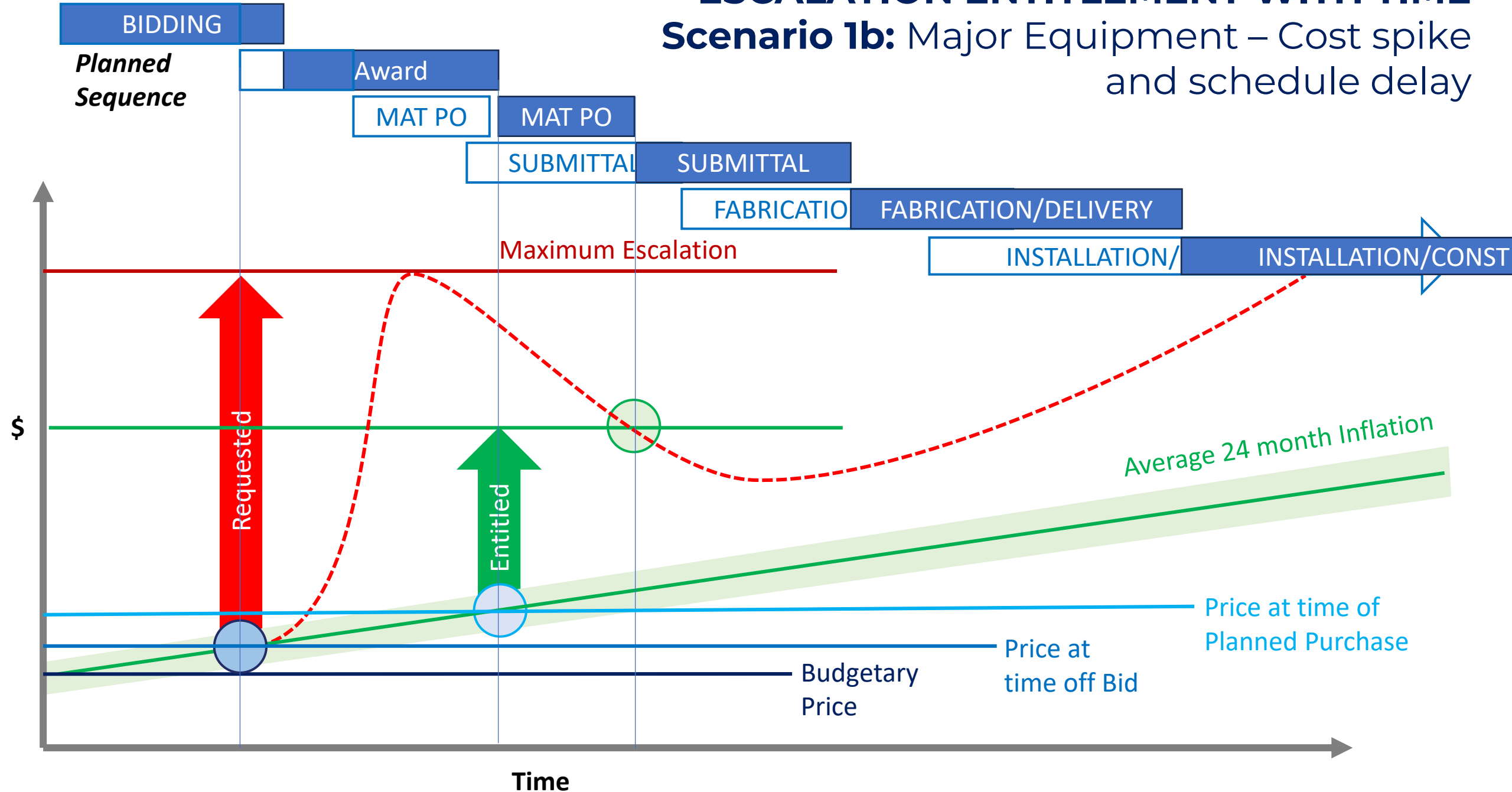
ESCALATION ENTITLEMENT WITH TIME

Scenario 1a: Major Equipment – Cost spike after award and before planned purchase



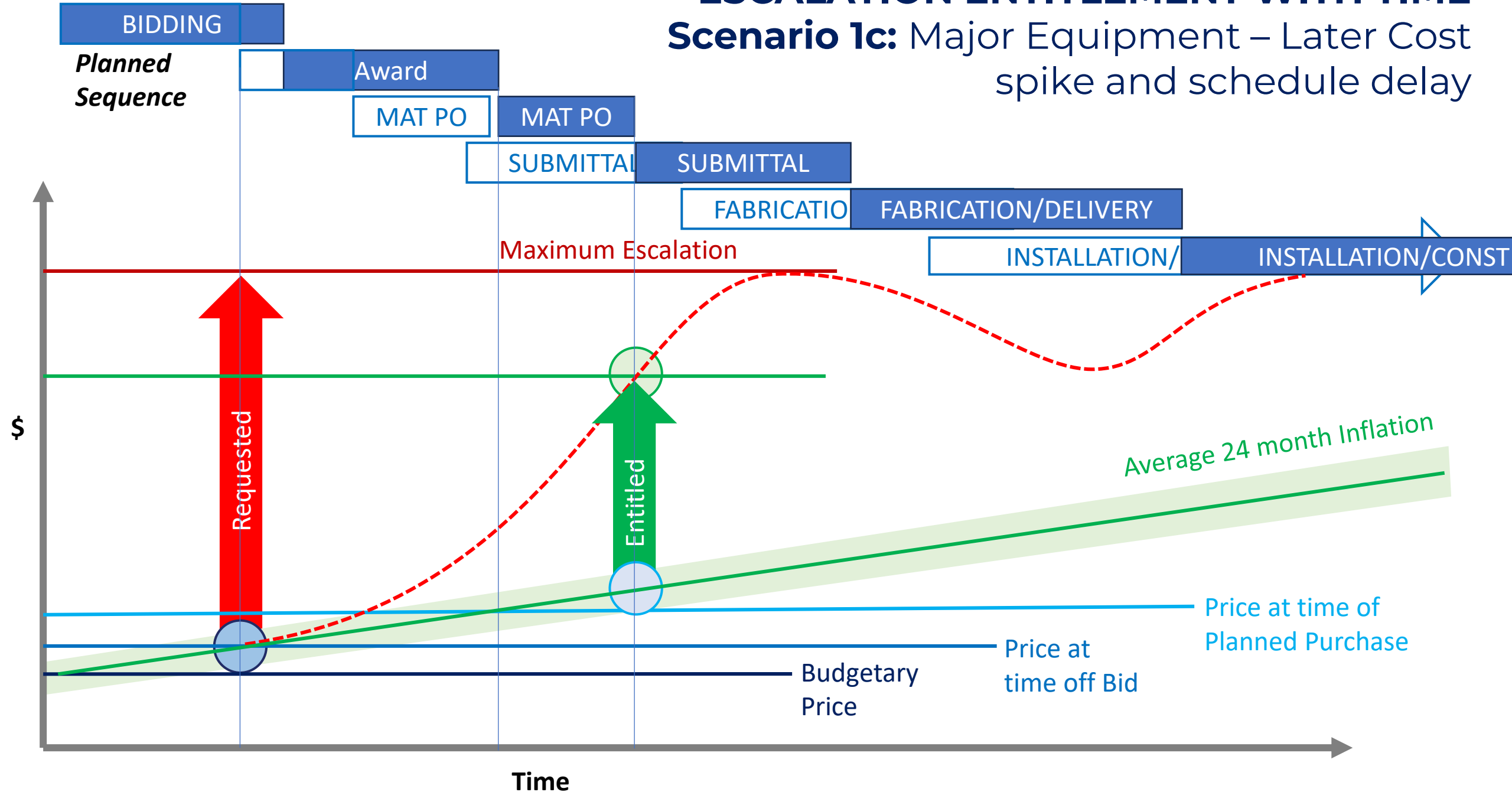
ESCALATION ENTITLEMENT WITH TIME

Scenario 1b: Major Equipment – Cost spike and schedule delay



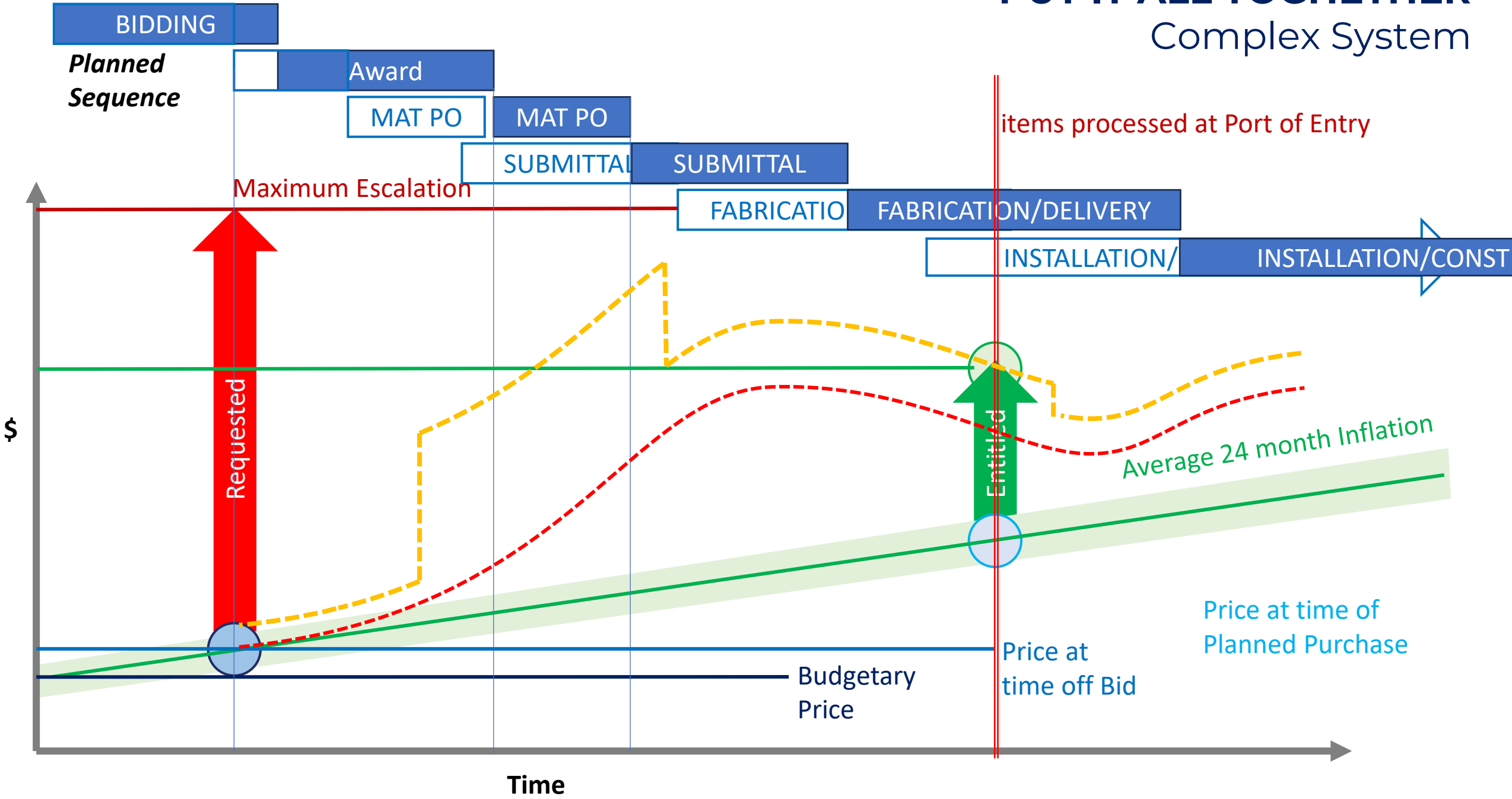
ESCALATION ENTITLEMENT WITH TIME

Scenario 1c: Major Equipment – Later Cost spike and schedule delay



PUT IT ALL TOGETHER

Complex System



Free Sources of Historic Data

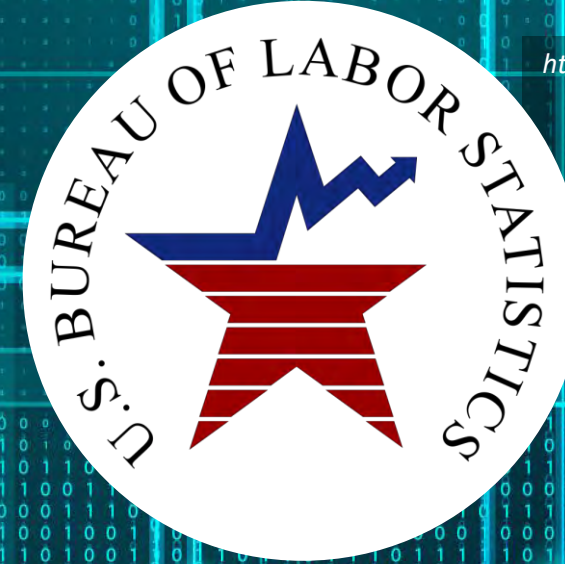


https://www.enr.com/economics/historical_indices

**TRADING
ECONOMICS**

<https://tradingeconomics.com/>

Most major sources of trending are derived from ENR and DOL
Historic data is about Indexes and not costs



<https://www.bls.gov/ppi/factsheets/producer-price-index-nonresidential-building-construction-initiative.htm>

DOL – PPI Dashboards: Often easier to navigate and with some extra data



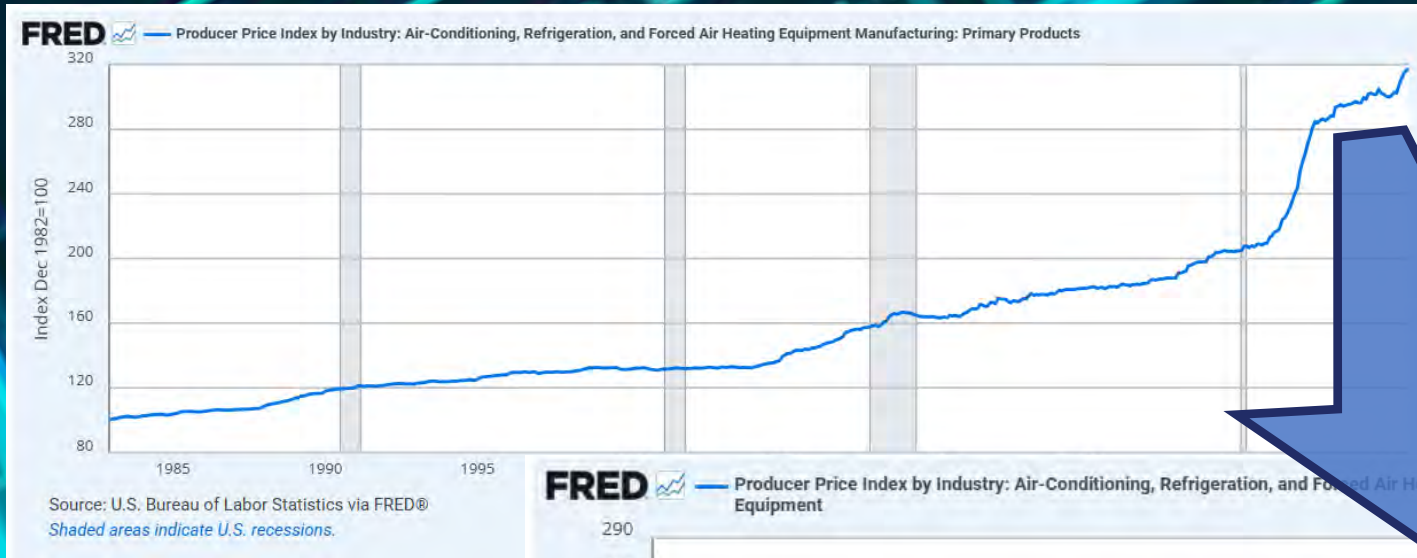
<https://fred.stlouisfed.org/categories/33573>



<https://www.agc.org/learn/construction-data/construction-data-producer-prices-and-employment-costs>

EXAMPLE:

Producer Price Index of HVAC

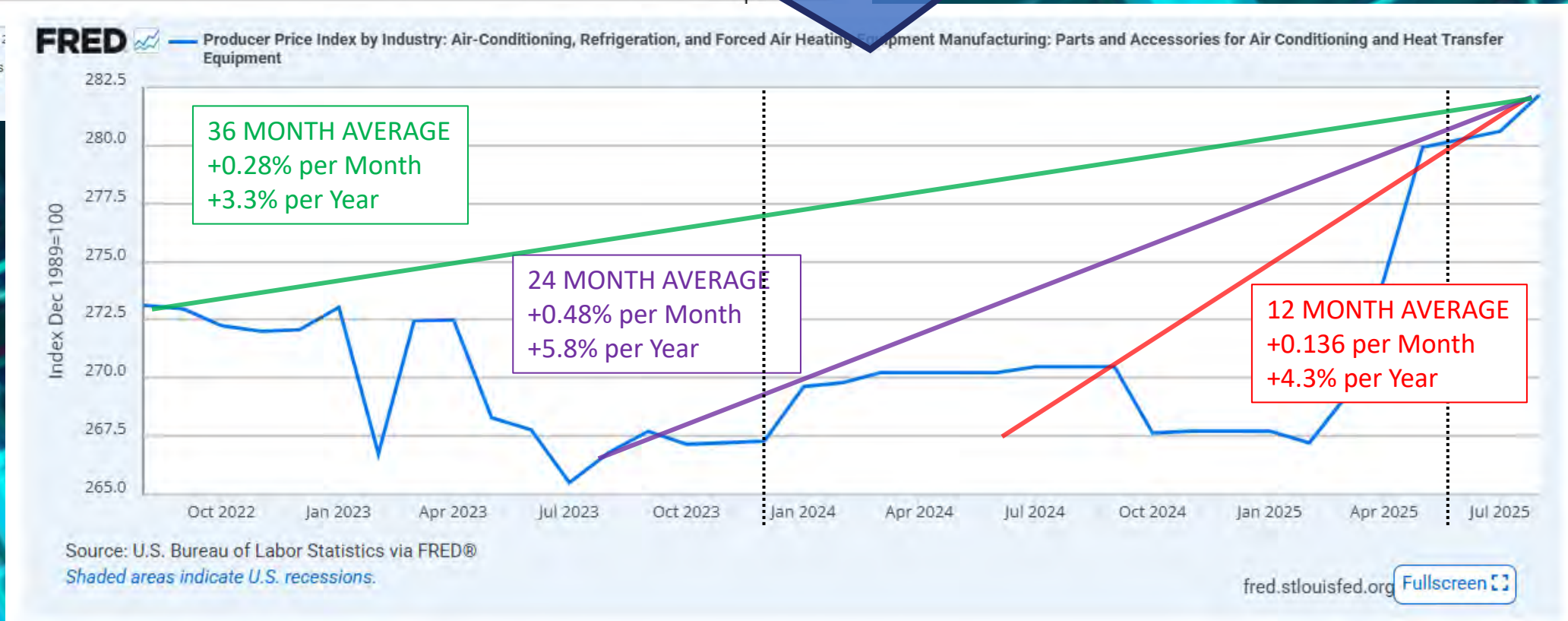


[REFERENCE LINK PPI](#)

fred.stlouisfed.org [Fullscreen](#)

EXAMPLE:

Producer Price Index of HVAC



EXAMPLE:

Producer Price Index of HVAC

12 Months @ +0.136%/Month

- Planned purchase is 14 months from date of bid
- A supplier or contractor should reasonably be able to predict that the equipment they are quoting today will cost 1.90% from the purchase price on the day of bid
- Recommendation is that this number is escalated by 25% to account for the potential variability
- $1.90\% \times 125\% = 2.30\%$
- This is a baseline for reasonable inflation.
- If escalation is being requested at 10% due to cost increases from the time of award, it must first account for the reasonable baseline.
- The recommended entitled value would be 7.7%



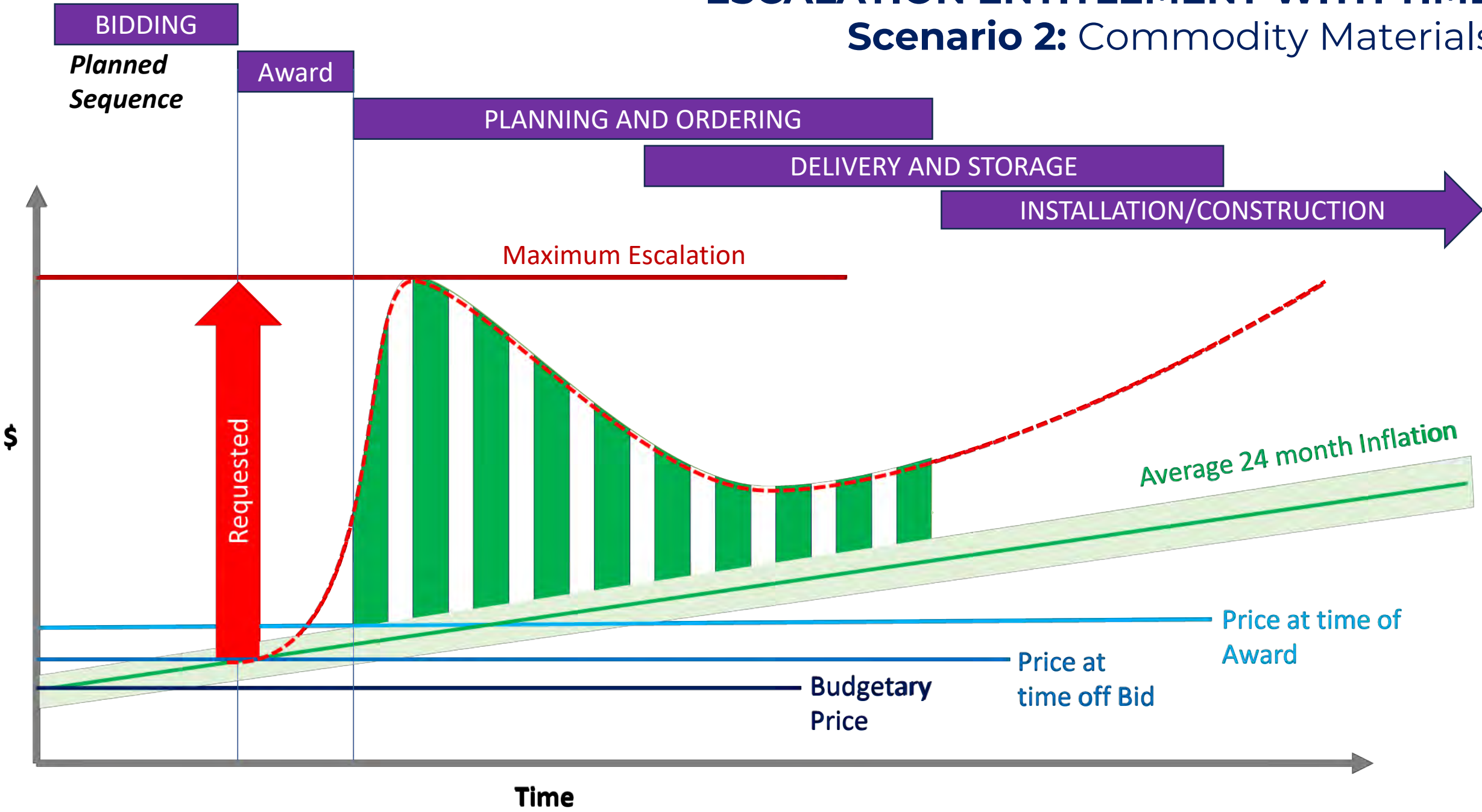
Commodity Material:

- May not be purchased in one lot at one moment in time
- Possibility that a contractor is stocking a warehouse and not all material is purchased for a specific project
- Also possible that contractor is buying material as needed



ESCALATION ENTITLEMENT WITH TIME

Scenario 2: Commodity Materials

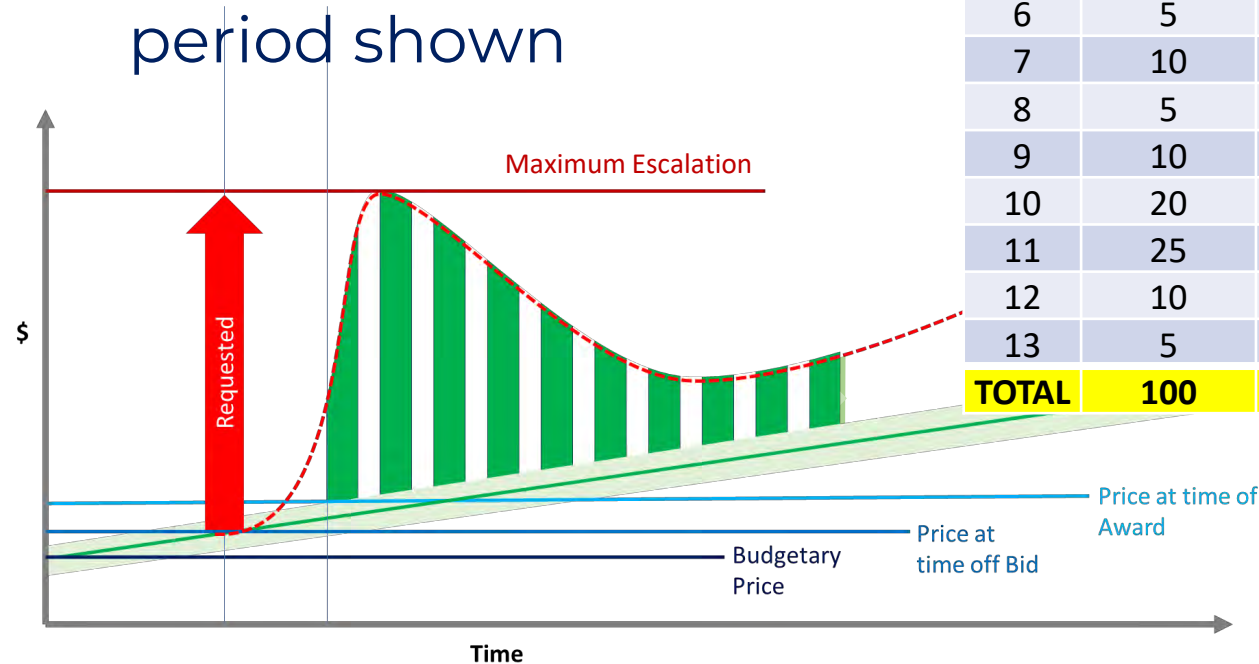


Commodity Material:

Supporting the costs:

- Most transparent – Contractor provides actual invoices
- Option 1: develop a purchase schedule and apply escalation per each period
- This example would yield a 5.82% allowable escalation for the period shown

Month after Award	Scheduled Value (\$K)	PPI – Hypothetical actual escalation event	Predicable inflation based on 12 month PPI average of 0.2% per month	Delta from hypothetical escalation and predicable inflation	Applied to Scheduled value
5	10	4%	1.0%	3.0%	0.3
6	5	7%	1.2%	5.8%	0.29
7	10	12%	1.4%	10.6%	1.06
8	5	13%	1.6%	11.4%	0.57
9	10	10%	1.8%	8.2%	0.82
10	20	8%	2.0%	6.0%	1.2
11	25	7%	2.2%	4.8%	1.2
12	10	6%	2.4%	3.6%	0.36
13	5	3%	2.6%	0.4%	0.02
TOTAL	100				5.82



Commodity Material:

Supporting the costs:

- Option 2 – find an equivalent average escalation over the time that material would be purchased
- The maximum during the period is 13%
- The minimum is 3%
- This example would yield a 6% allowable escalation



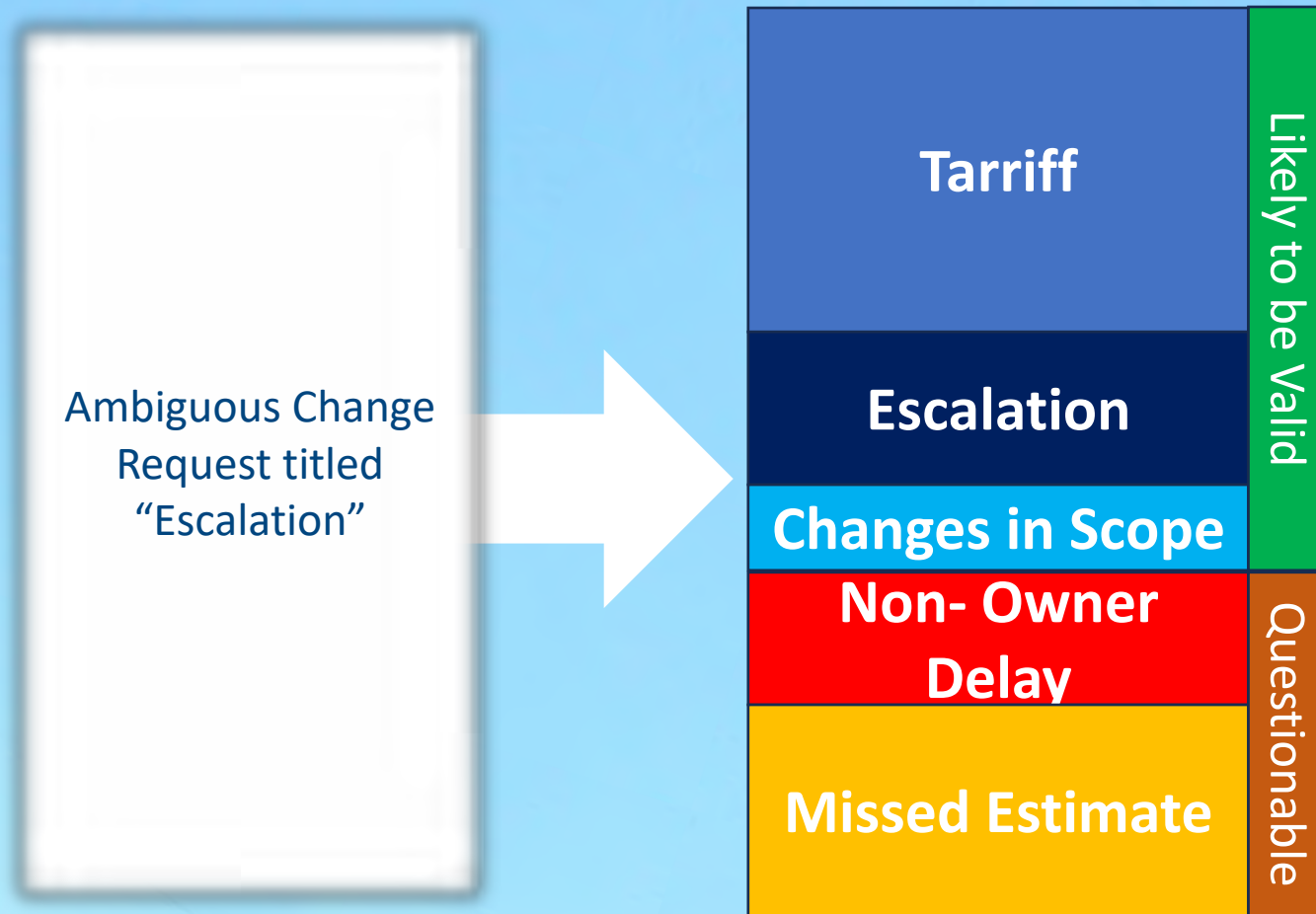
Month after Award	PPI – Hypothetical actual escalation event	Predicable inflation based on 12 month PPI average of 0.2% per month	Delta from hypothetical escalation and predicable inflation
5	4%	1.0%	3.0%
6	7%	1.2%	5.8%
7	12%	1.4%	10.6%
8	13%	1.6%	11.4%
9	10%	1.8%	8.2%
10	8%	2.0%	6.0%
11	7%	2.2%	4.8%
12	6%	2.4%	3.6%
13	3%	2.6%	0.4%
			6% Average

Beware of the train crossing affect!

Tariffs and Escalation used to recover from internal overruns and delays present prior to the event

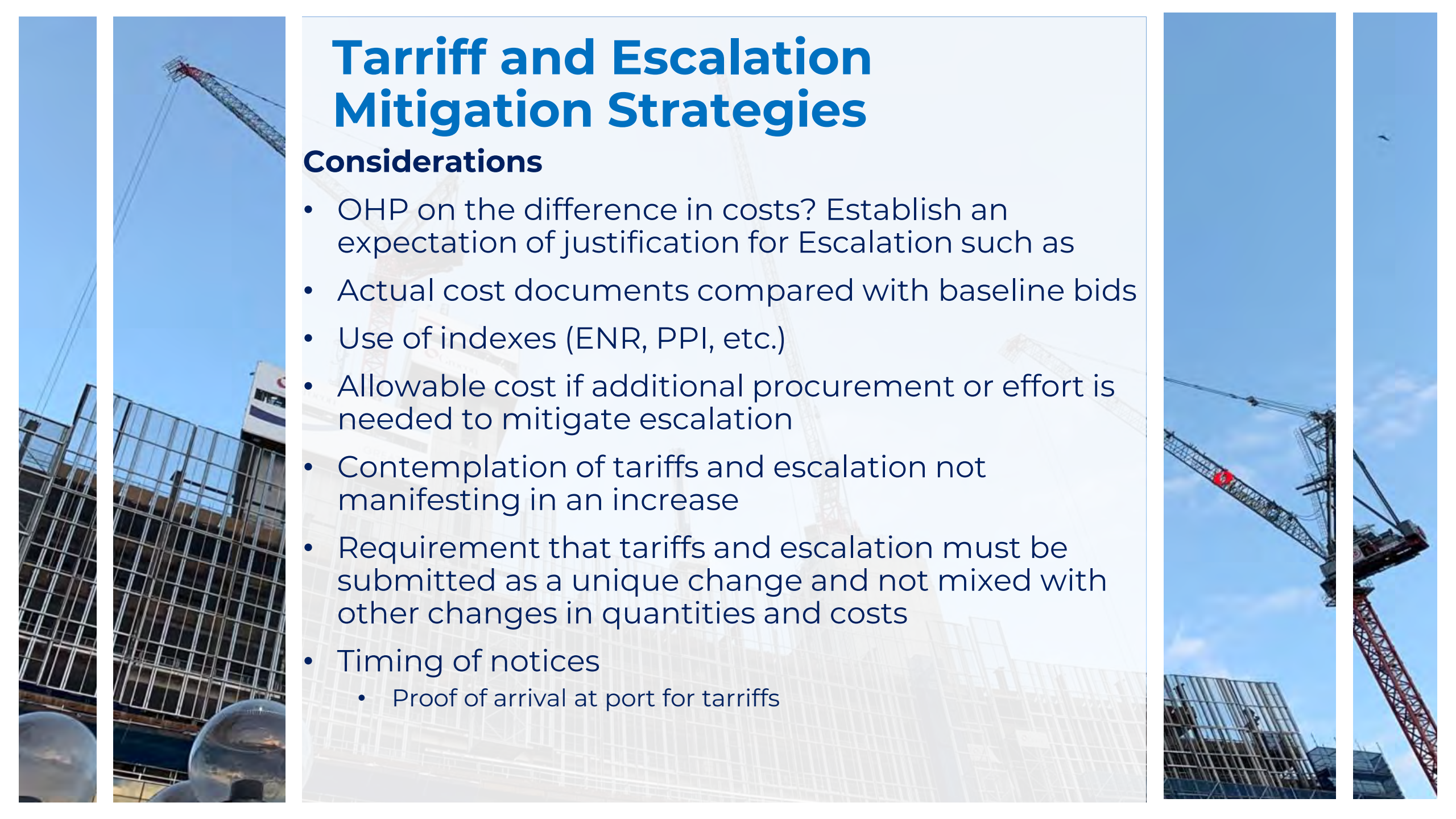


Clear Delineation of Root Cause



There is a tendency to combine cost increases either because it is difficult to know or to hide an existing problem

Ambiguity creates the potential for delay and dispute on approving the valid parts of the change requests



Tariff and Escalation Mitigation Strategies

Considerations

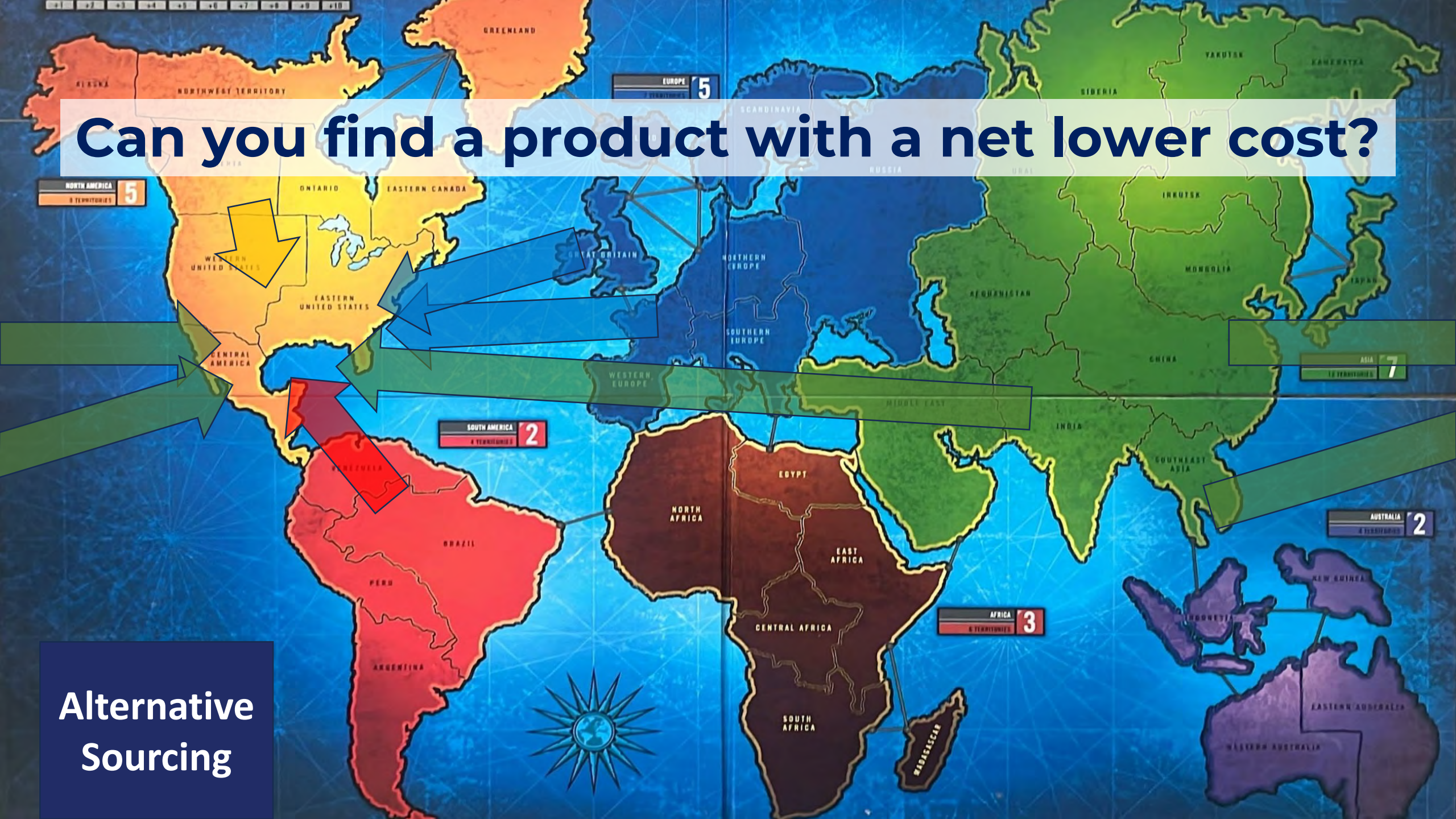
- OHP on the difference in costs? Establish an expectation of justification for Escalation such as
- Actual cost documents compared with baseline bids
- Use of indexes (ENR, PPI, etc.)
- Allowable cost if additional procurement or effort is needed to mitigate escalation
- Contemplation of tariffs and escalation not manifesting in an increase
- Requirement that tariffs and escalation must be submitted as a unique change and not mixed with other changes in quantities and costs
- Timing of notices
 - Proof of arrival at port for tariffs

Tariffs and Escalation on your Current Project

- Check your existing contractual language
- Contingency language
- Force Majeure clauses typically do not address cost only events (tariffs)
 - Is there language about Unforeseeable Events
- Check PO's for shipping terms as relates to tariffs
- Identify cost of the work includes tariffs for when the material/equipment will cross the border(s)
- Be fair and equitable



Can you find a product with a net lower cost?



**Alternative
Sourcing**



Considerations when changing sources

- Cancellation/Restocking Fees
- Tarrieff cost vs Stored Material Cost
- Design modifications and rework
- Resulting delays
 - Direct - Contractor/Subcontractor extended GCs
 - Indirect
 - Owner Financial carrying Cost
 - Lost Revenue
 - Idle staff, temporary space, unanticipated disruption
 - Future compatibility with your facility(s)

Example of Sourcing Analysis

Description	%	CURRENT	%	ALTERNATE
Value		5,000,000		5,000,000
Tarriff	35%	1,750,000	10%	500,000
Cancelation/Restock Fee			10%	175,000
Extended GC - 1 Month				50,000
Engineering Fee				5,000
Rework				200,000
Subtotal		6,750,000		5,930,000
Carrying Cost (Loan at 9% APR of 100M) for 1 month				750,000
Internal Temp Facility				200,000
Total		6,750,000		6,880,000

Your organization and project's exact circumstances will make a difference to the value of an alternate sourcing approach

Summary

- Tariffs and escalation represent real risks in today's construction market
- Evaluating entitlement can be tied to the schedule and known market indicators
- Keep escalation and tariffs as unique changes
- Use caution when evaluating alternate sourcing
- Be Fair and Equitable

QUESTIONS AND DISCUSSION

Evaluating Costs for Tariffs and Other Escalations Other

John J. Mumma, JD, CM-Lean
Executive Director, Procurement Officer
Construction & Facilities Strategic Acquisitions
University of Maryland, Baltimore

Jake Ortego, PE, CCE, CCA, CCP, CAE
Principal
Audit & Advisory
[HPM](#)