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PARCA Examples

28th August 2013

Objective of Slides

- To provide examples of where PARCAs can be used
- To present the implications of a customer cancelling a PARCA
  - For that Customer and for other users
- To highlight issues surrounding interactive PARCAs
  - Capacity Implications
  - Financial Implications
- To provide a comparison to existing Auction and Application regimes

Exit Example 1

A single customer requiring incremental exit capacity & investment

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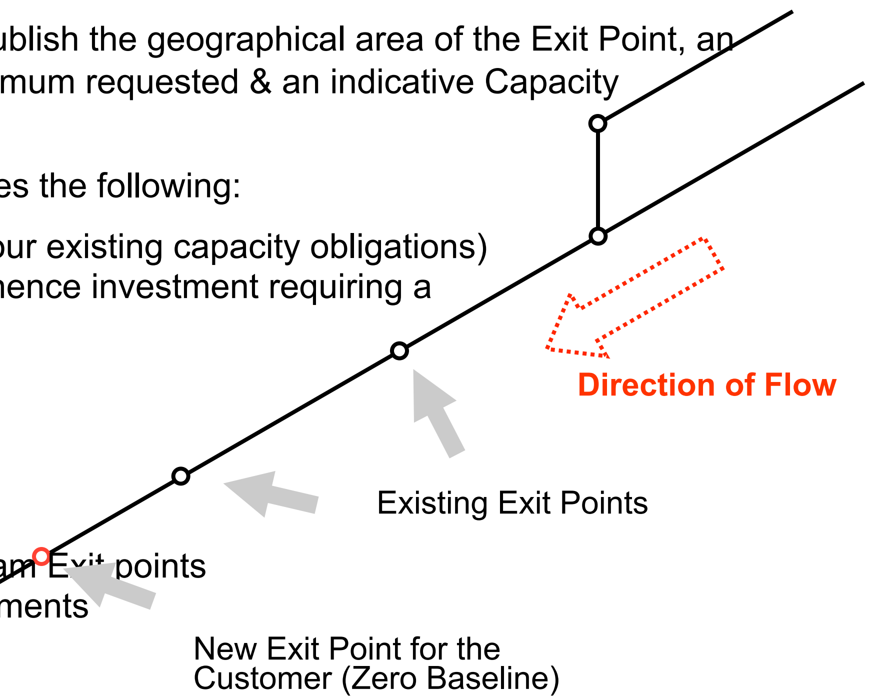
A Single Customer

- The Customer requires exit capacity at a new NTS exit point from October 2019 and approaches NG NTS in 2014.
- The Customer could signal this capacity in the July 2014 Exit Capacity Application Window as Oct 2019 would be Y+6
- However the Customer decides to sign a PARCA and pays the Phase 1 fee
- Within 10 days of initiation of Phase 1, NG NTS will publish the geographical area of the Exit Point, an indicative range of Exit Capacity based upon the maximum requested & an indicative Capacity Reservation Date
- NG NTS undertakes the Phase 1 works and determines the following:

✓ There is insufficient existing system capability (given our existing capacity obligations) to provide the Customer's capacity requirement and hence investment requiring a revenue driver is required

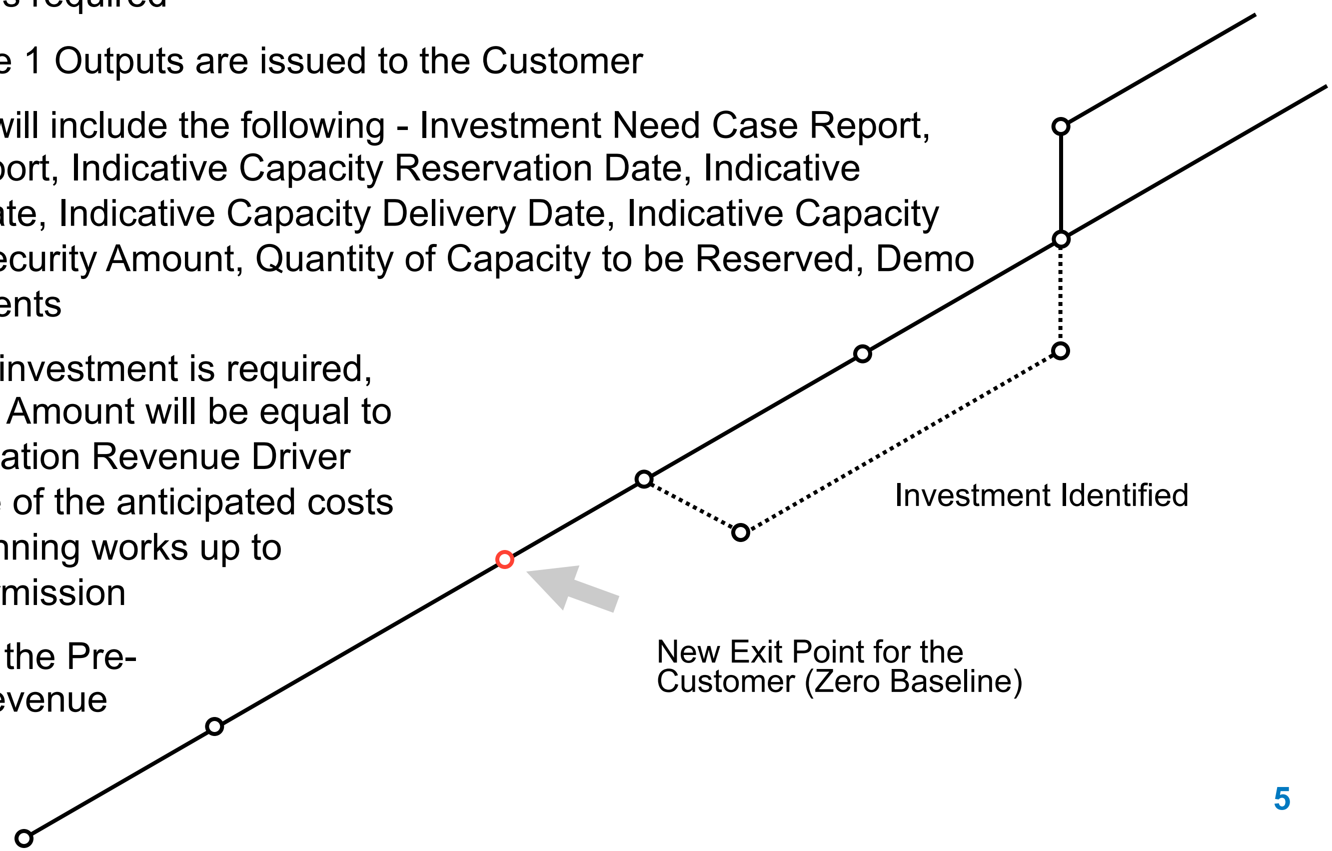


✓ There is no substitutable unsold capacity at downstream Exit points which could be used to reduce the investment requirements

✓ It is unlikely that a contractual solution, as an alternative to investment, could be sought as the downstream exit points are DNOs who would be unable to provide a commercial turn up or turn down service, given their own

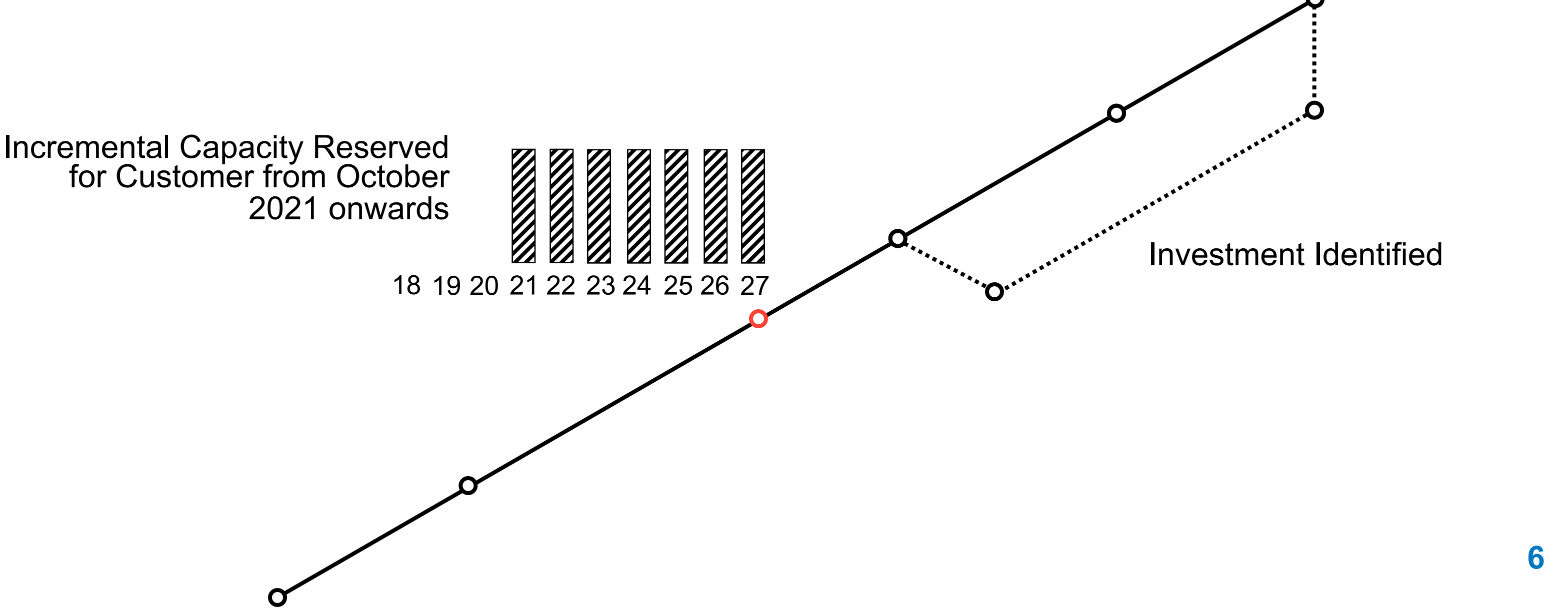
A Single Customer

- ✓ Therefore, investment to increase system capability is required
- ✓ The earliest that this could be provided is October 2021, two years later than when the customer originally wanted access to the NTS
- ✓ As the capacity is required at a new exit point, and substitution is not available, the release of Incremental Capacity is required
- The appropriate Phase 1 Outputs are issued to the Customer
- The Phase 1 outputs will include the following - Investment Need Case Report, Technical Options Report, Indicative Capacity Reservation Date, Indicative Capacity Allocation Date, Indicative Capacity Delivery Date, Indicative Capacity Charges, Indicative Security Amount, Quantity of Capacity to be Reserved, Demo Info & Date Requirements
- For this Customer, as investment is required, the Indicative Security Amount will be equal to the Pre-Capacity Allocation Revenue Driver which will be reflective of the anticipated costs for undertaking all planning works up to obtaining planning permission
- NG NTS will calculate the Pre-Capacity Allocation Revenue Driver during Phase 1



A Single Customer

- Following the completion of the Phase 1 cost reconciliation, the Customer confirms that they wish to proceed to Phase 2
- Customer A provides the required level of security and the incremental capacity at the Customer's Exit Points is reserved from October 2021
- The Capacity Allocation Date, where the Reserved Capacity will be allocated to the Customer is set at October 2019
- The Capacity Delivery Date is set at October 2021
- In order to continue reserving the capacity Customer A must continue to provide security and meet the demonstration info requirements specified in their PARCA



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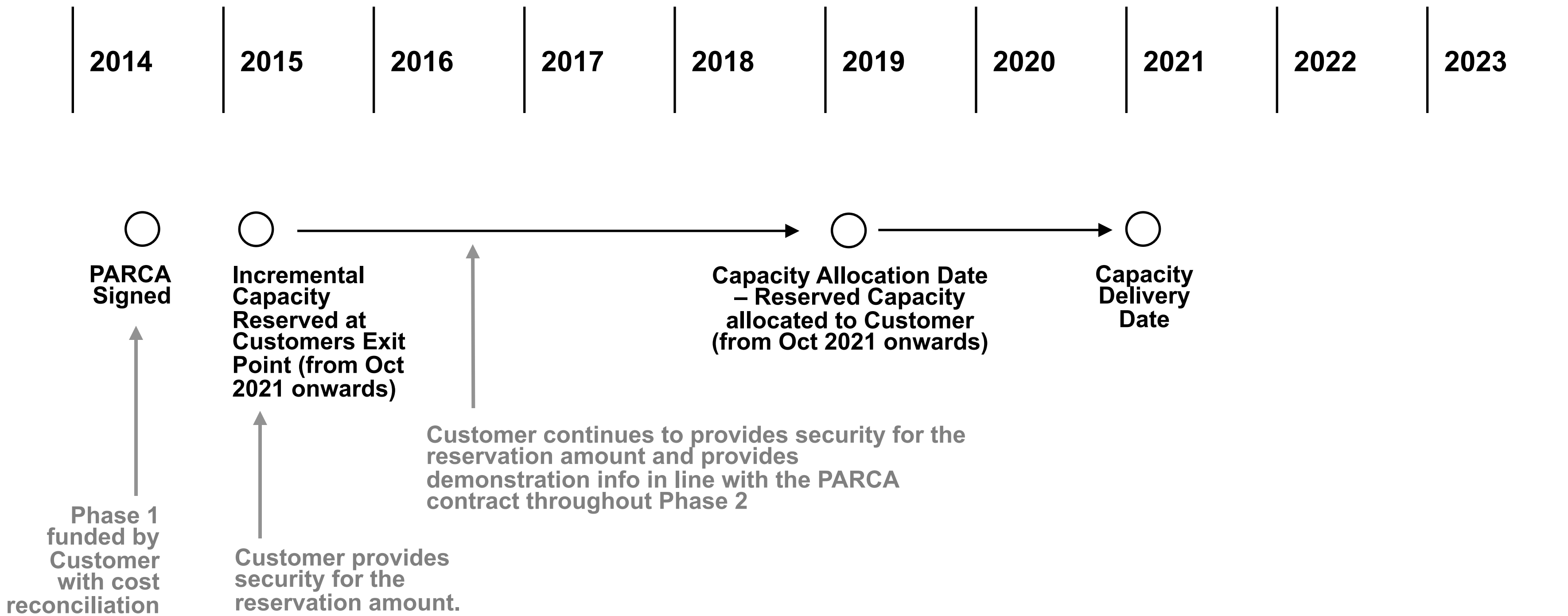
Customer Timeline



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Financial Impacts – Single Customer (no termination)

Under Current Exit Application Arrangements

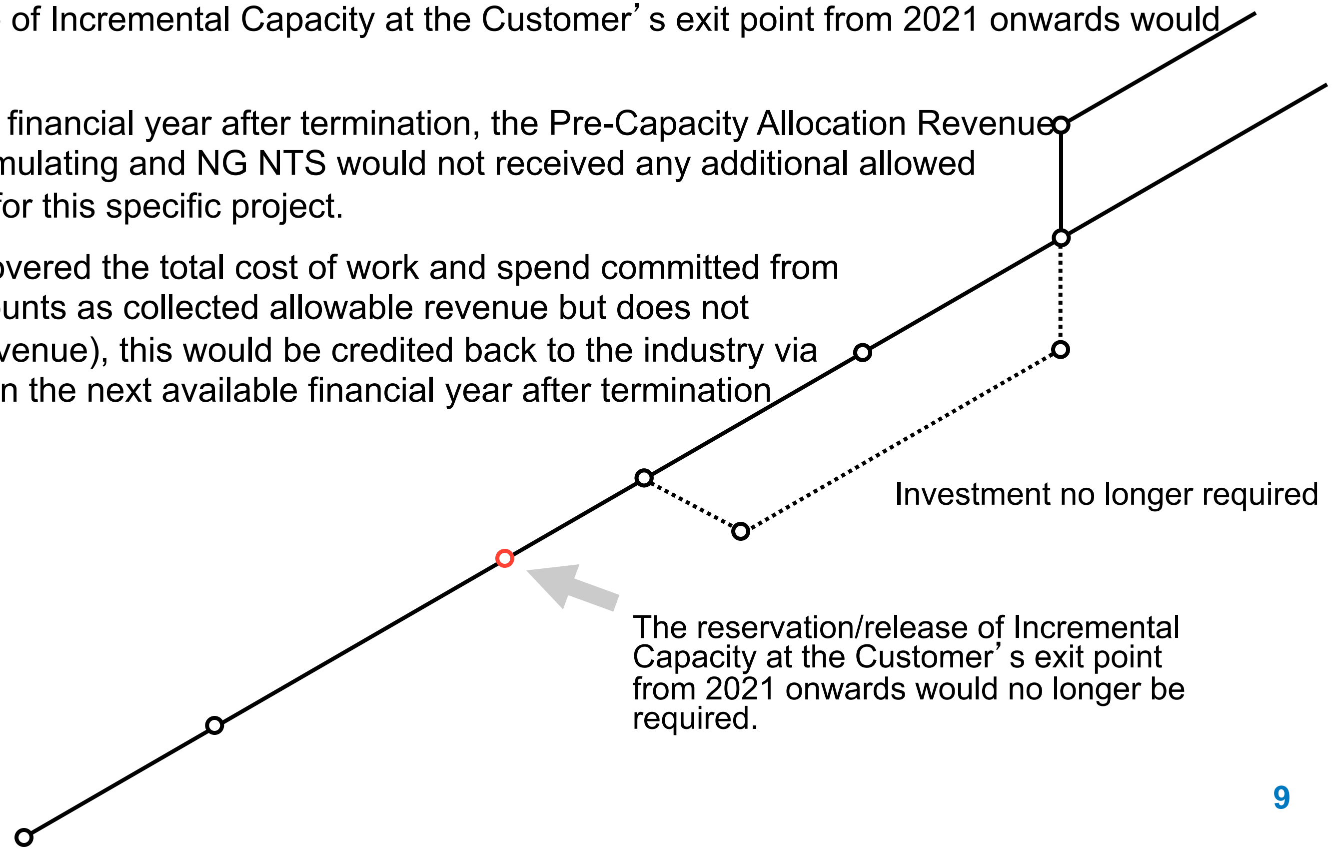
- Risks/Benefits for Customer
  - Financial User Commitment to capacity occurs earlier - less certainty of the capacity quantity required and the date it is required from
  - May not be able to utilise commercial capacity i.e. misalignment between commercial capacity delivery and physical reinforcement
  - Security not required until 12 months prior to capacity delivery date
- Risks/Benefits for all Users
  - Greater potential for constraint management costs
  - Potential for less efficient build solution and increased charges

Under PARCA proposals

- Risks/Benefits for Customer
  - Commercial capacity delivery timescales and NTS reinforcement delivery timescales aligned – customer able to utilise commercial capacity rights from day 1.
  - Financial commitment to capacity occurs closer to first gas day
  - Potential to finesse capacity quantity to better align to actual need case
  - Increased security requirements
- Risks/Benefits for all Users
  - Customers able to formally engage earlier - facilitates better NG forecasting and predictability of charges for all Users
  - No adjustments on Industry Transportation Charges until allocation of capacity
  - Potential for more efficient and economic build solution

What If…the Customer Cancels their PARCA?

- Should the Customer wish to cancel their PARCA during the Phase 2 works. NG NTS would stop work on developing the investment project immediately.
- We would invoice the Customer for the total cost of work incurred and spend committed to at the time of termination. If this is not paid, or if the customer instructs NG NTS to utilise the security, we would draw down on the security provided by the Customer.
- The reservation/release of Incremental Capacity at the Customer's exit point from 2021 onwards would no longer be required.
- From the next available financial year after termination, the Pre-Capacity Allocation Revenue Driver would stop accumulating and NG NTS would not received any additional allowed revenue after this date for this specific project.
- Once NG NTS had recovered the total cost of work and spend committed from the Customer (which counts as collected allowable revenue but does not increase the allowed revenue), this would be credited back to the industry via transportation charges in the next available financial year after termination



Exit Example 1

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Customer Timeline (following termination)

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023

PARCA Signed

Incremental Capacity Reserved at Customers Exit Point (from Oct 2021 onwards)

Customer cancels PARCA

The reservation/release of Incremental Capacity from 2021 onwards would no longer be required

NG NTS would invoice the Customer for the costs of works incurred and spend committed to at the time of termination. If this is not paid, or if the customer instructs NG NTS to utilise the security, we would draw down on the security provided by the Customer.

From the next available financial year after termination, the Pre-Capacity Allocation Revenue Driver would stop accumulating and NG NTS would not received any additional revenue after this date.

Once NG NTS had recovered the total cost of work and spend committed from the Customer, this would be credited back to the industry via transportation charges

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Financial Impacts (following termination)

Under Current Exit Application Arrangements

- Risks / Benefits for Customer
  - No contract termination clauses – financial User Commitment to capacity that may not be required
  - Termination is possible through voluntary discontinuance or insolvency only - potentially lead to perverse incentives to avoid payment of capacity charges
  - Security not required until 12 months prior to capacity delivery date
- Risks / Benefits for all Users
  - Permits may have been utilised / sought unnecessarily (Permit allowance funded by all users)
  - Buy back scheme may have been adjusted unnecessarily
  - Potential for unrecovered revenue being funded socially (increased transportation charges)
  - Lower security requirements - increased likelihood of bad debt

Under PARCA proposals

- Risks/Benefits for Customer
- Allows termination of contract ahead of financial User commitment to capacity
  - Financial liability likely to be lower in the event of termination
- Risks/Benefits for all Users
  - Reduced potential for socialised funding of stranded capacity
  - No permit scheme under PARCA proposals
  - No unnecessary adjustment to buy back scheme
  - Increased security requirements - less likelihood of bad debt

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Exit Example 2

An PARCA scenario, with two customers requiring exit capacity in a part of the network where Substitution is available for one customer only

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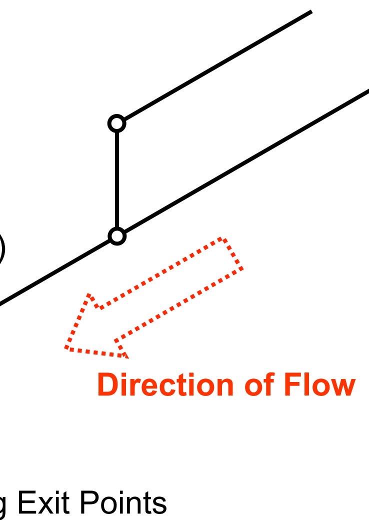
Customer A

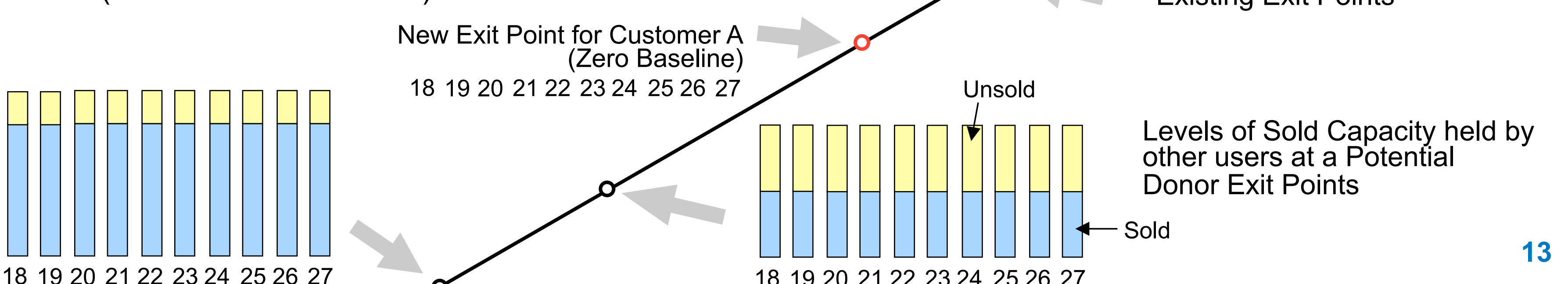
- Customer A requires exit capacity from October 2023 (as they require their own Planning Act application and complex build) and approaches NG NTS in 2014.
- Customer A could not obtain this capacity in the July 2014 Exit Capacity Application window as 2023 would be Y+9 (only applications up to Y+6 can be made in the July Window)
- Customer A signs a PARCA and pays the Phase 1 fee
- Within 10 days of initiation of Phase 1, NG NTS will publish the geographical area of the Exit Point, an indicative range of Exit Capacity based upon the maximum requested & an indicative Capacity Reservation Date
- NG NTS undertakes the Phase 1 works and determines the following:

✓ There is insufficient existing system capability (given our existing capacity obligations) to provide the Customer's capacity requirement and hence investment requiring a revenue driver is required

✓ However (in this case) there is sufficient unsold capacity at downstream exit points

✓ (continued on next slide)





Exit Example 2

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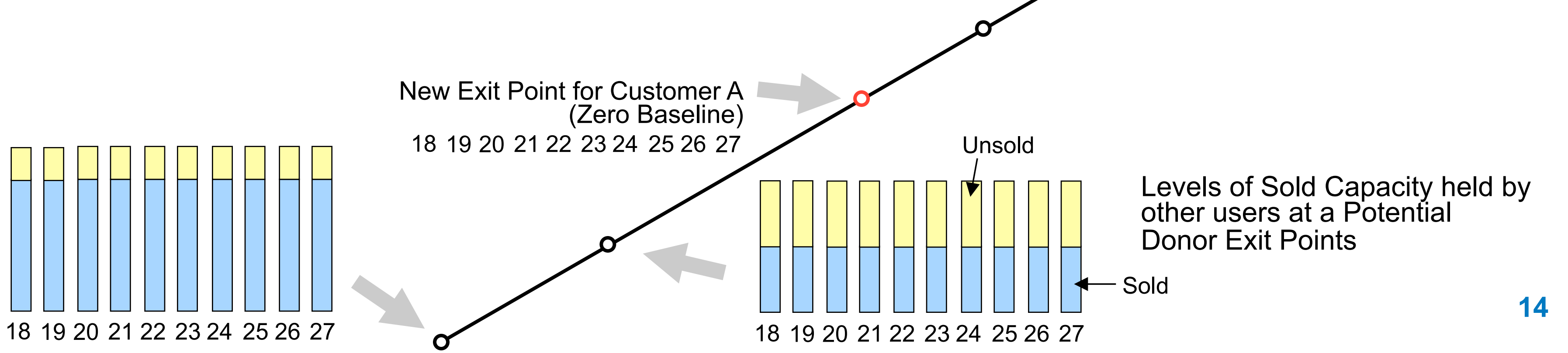
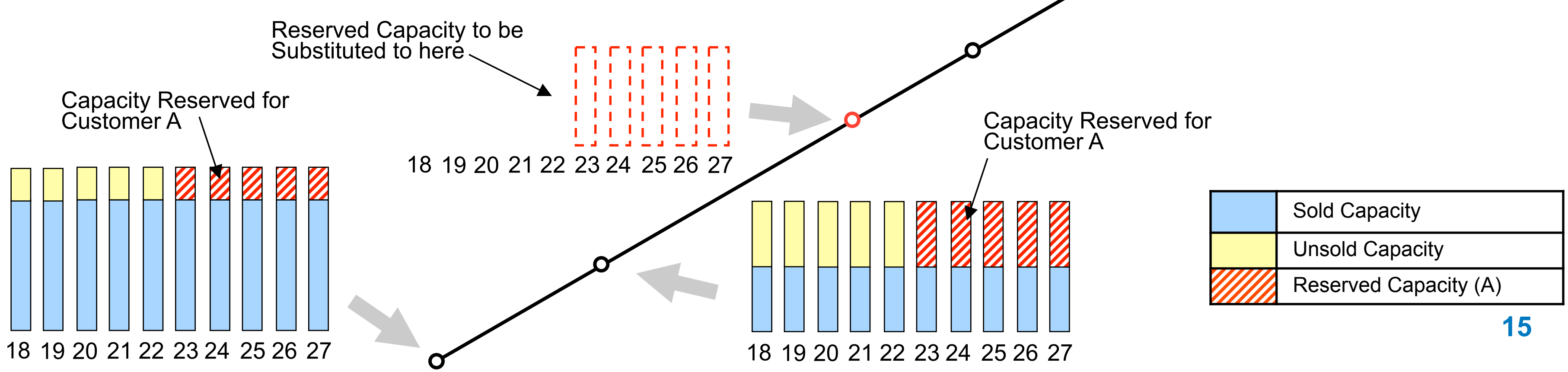
Customer A

- ✓ Therefore the substitution of unsold capacity is available from downstream exit points to provide the capacity requirements at Customer A's exit point
- ✓ The release of Incremental Capacity is not required.
- The appropriate Phase 1 Outputs are issued to Customer
- The Phase 1 outputs will include the following - Investment Need Case Report, Technical Options Report, Indicative Capacity Reservation Date, Indicative Capacity Allocation Date, Indicative Capacity Delivery Date, Indicative Capacity Charges, Indicative Security Amount, Quantity of Capacity to be Reserved, Demo Info & Date Requirements
- For this Customer, as investment is not required, the Indicative Security Amount will be the Capacity Reservation Amount which will be equal to 10% of the of the indicative User Commitment value (i.e. 10% of 4 years of capacity charges)
- A Pre-Capacity allocation Revenue Driver will not be required as no investment is required



Customer A

- Following the completion of the Phase 1 cost reconciliation, Customer A confirms that they wish to proceed to Phase 2
- Customer A provides the required level of security and the unsold capacity at the donor exit points is reserved from October 2023 and is therefore unavailable for other NTS Users from this date onwards
- The Capacity Allocation Date for the reserved capacity is set at October 2021
- The Capacity Delivery Date is set at October 2023
- In order to continue reserving the capacity Customer A must continue to provide security and meet the demonstration info requirements specified in their PARCA



Exit Example 2

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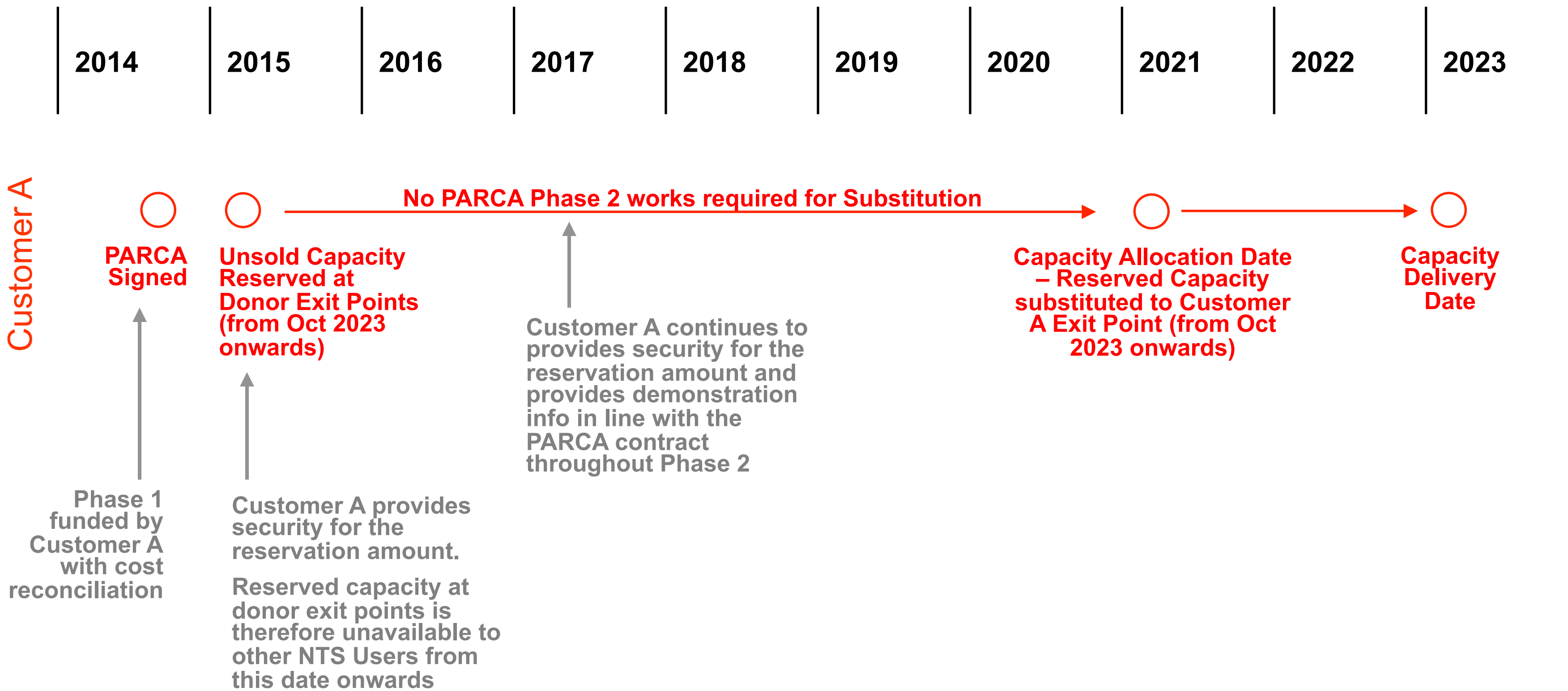
Customer A Timeline



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Customer B

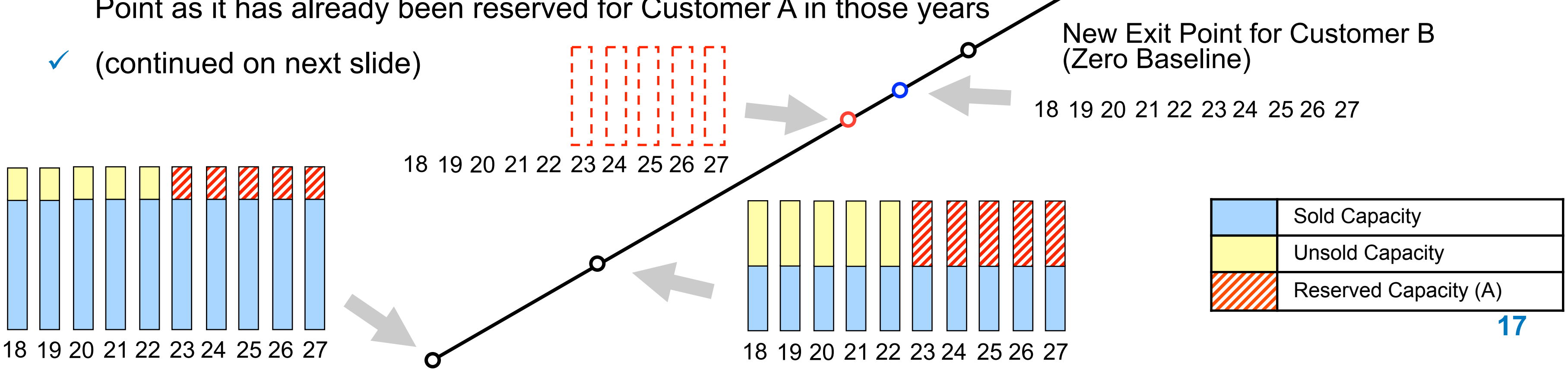
- Customer B requires the same quantity of exit capacity from October 2020 (3 years earlier than Customer A) and approaches NG NTS in 2015 (one year later)
- Customer B could signal the requirement for this this capacity via the July 2015 Exit Capacity Application window as 2020 would be Y+6
- However Customer B signs a PARCA and pays the Phase 1 fee
- NG NTS would publish the applicable info as per for Customer A
- NG NTS undertakes the Phase 1 works and determines the following:

✓ There is insufficient existing system capability (given or existing capacity obligations) to provide the Customer’s capacity requirement and hence investment requiring a revenue driver is required

✓ For gas years 2020 - 2022 there is sufficient unsold capacity at Donor Exit Points that can be substituted to Customer B’s exit point

✓ However, this quantity is not available for all future years at the donor Exit Point as it has already been reserved for Customer A in those years

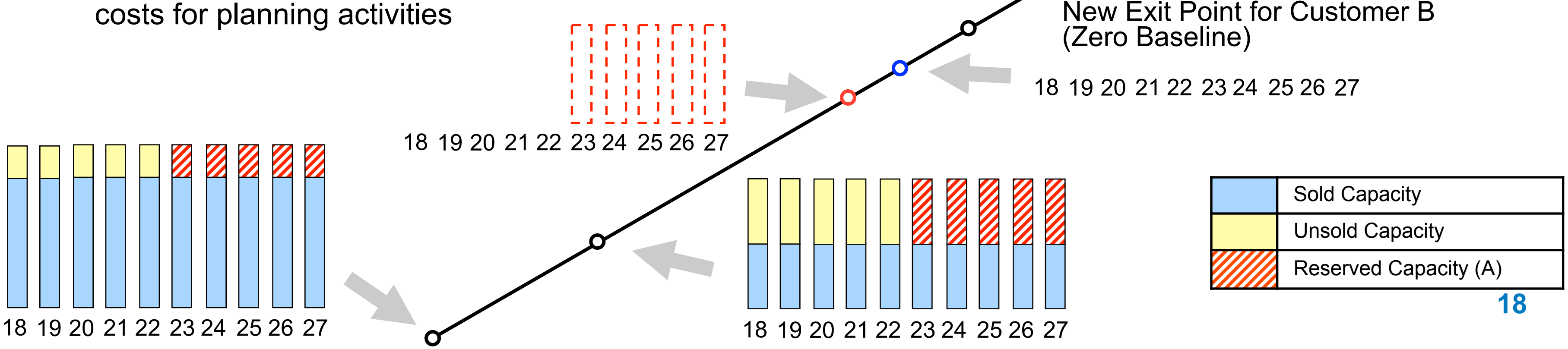
✓ (continued on next slide)



Customer B

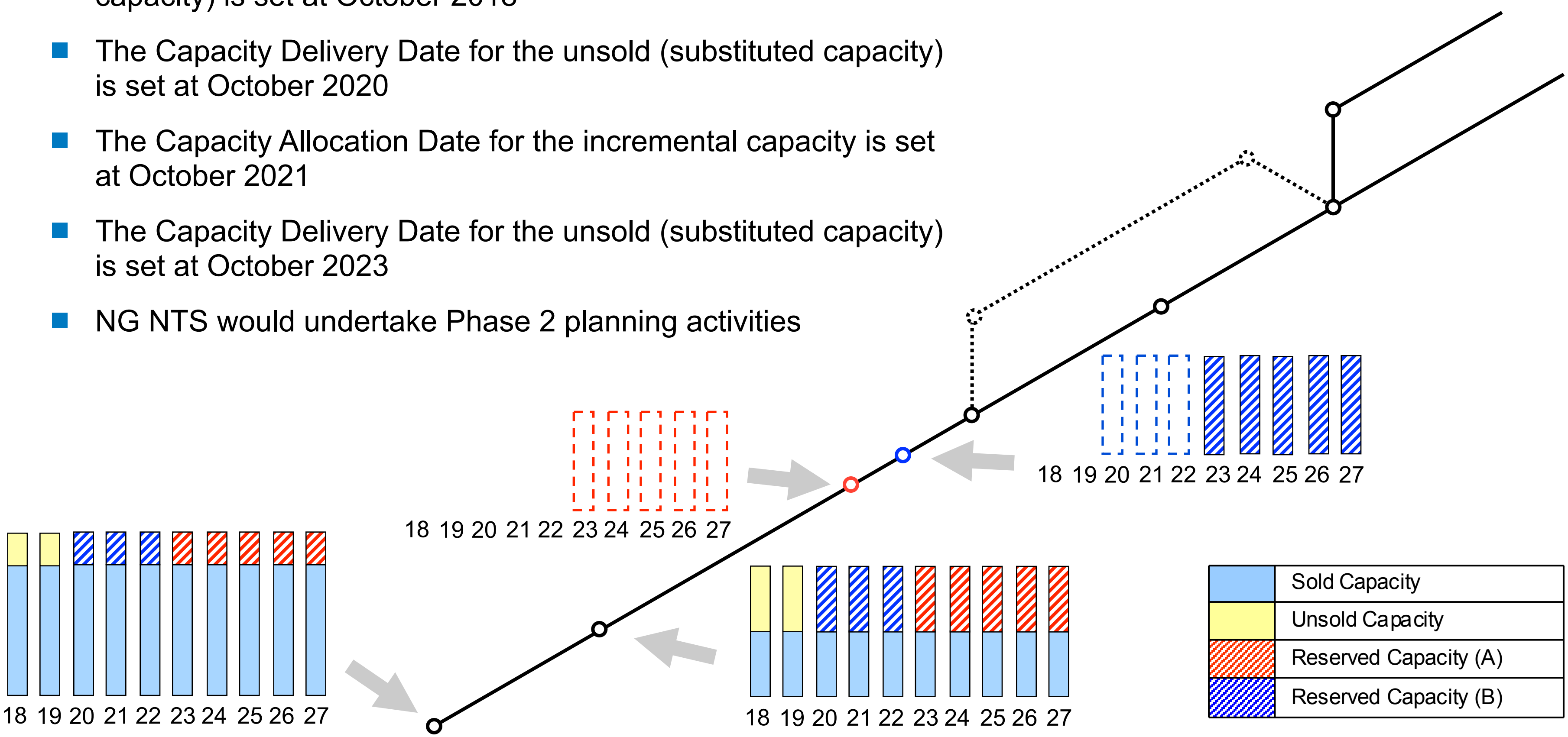
- ✓ As a result, substitution is not allowed as per the ExCS however we are considering modifying the statement to increase flexibility for customers
- ✓ This would then allow Customer B to gain access to the NTS in 2020 (as requested) via the substitution of unsold capacity. The release of Incremental capacity would be required at customer B's exit point from 2023 onwards. This example assumes that this change to the ExCS has been made.
- ✓ In order to provide the incremental capacity and to ensure that NG NTS can maintain it's 1:20 demand obligation, investment would be required to increase system capability – NG NTS identify that investment can be provided for 2023

- The appropriate Phase 1 Outputs (as per those for Customer A) are issued to Customer B
- As investment is required for Customer B the Indicative Security Amount will be equal to the Pre-Capacity Allocation Revenue Driver which will be reflective of the anticipated costs for undertaking all planning works up to obtaining planning permission
- Customer B would not be required to provide security for the Reservation Amount for the unsold capacity to be reserved at the donor points as they would provide security for the value of the anticipated costs for planning activities



Customer B

- Following the completion of the Phase 1 cost reconciliation, Customer B confirms that they wish to proceed to Phase 2
- Customer B provides the required level of security and the identified quantities of unsold and Incremental Capacity are reserved at the donor exit points and Customer B's exit point respectively
- The Capacity Allocation Date for the unsold (substituted capacity) is set at October 2018
- The Capacity Delivery Date for the unsold (substituted capacity) is set at October 2020
- The Capacity Allocation Date for the incremental capacity is set at October 2021
- The Capacity Delivery Date for the unsold (substituted capacity) is set at October 2023
- NG NTS would undertake Phase 2 planning activities



Exit Example 2

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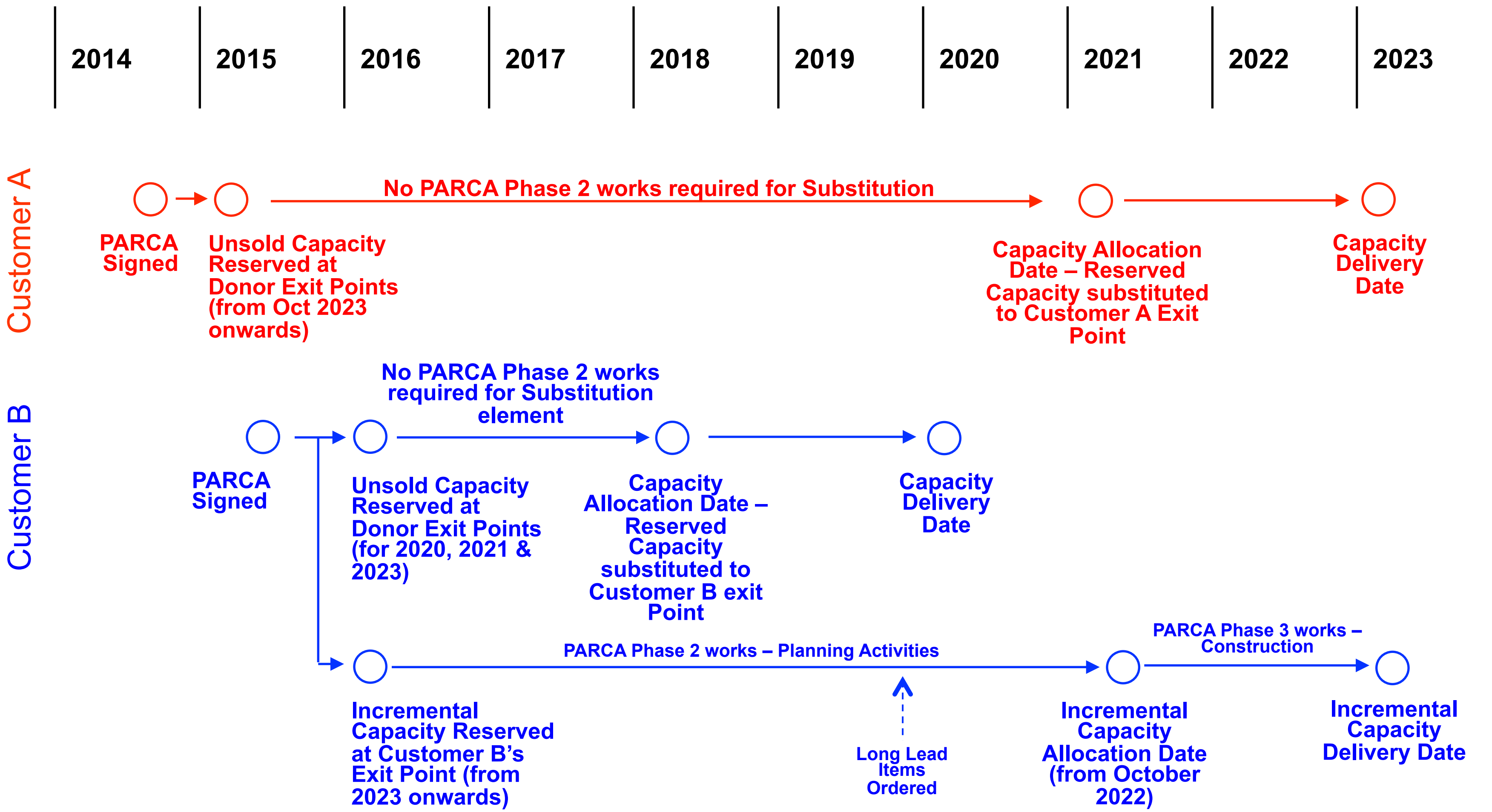
Customer Timelines



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Financial Impacts

Under Current Exit Application Arrangements

- Risks/Benefits for Customers A and B
  - Financial User Commitment to capacity occurs earlier - less certainty of the capacity quantity required and the date it is required from
  - May not be able to utilise commercial capacity i.e. misalignment between commercial capacity delivery and physical reinforcement
  - Security not required until 12 months prior to capacity delivery date
- Risks/Benefits for all Users
  - Greater potential for constraint management costs
  - Potential for less efficient build solution and increased charges

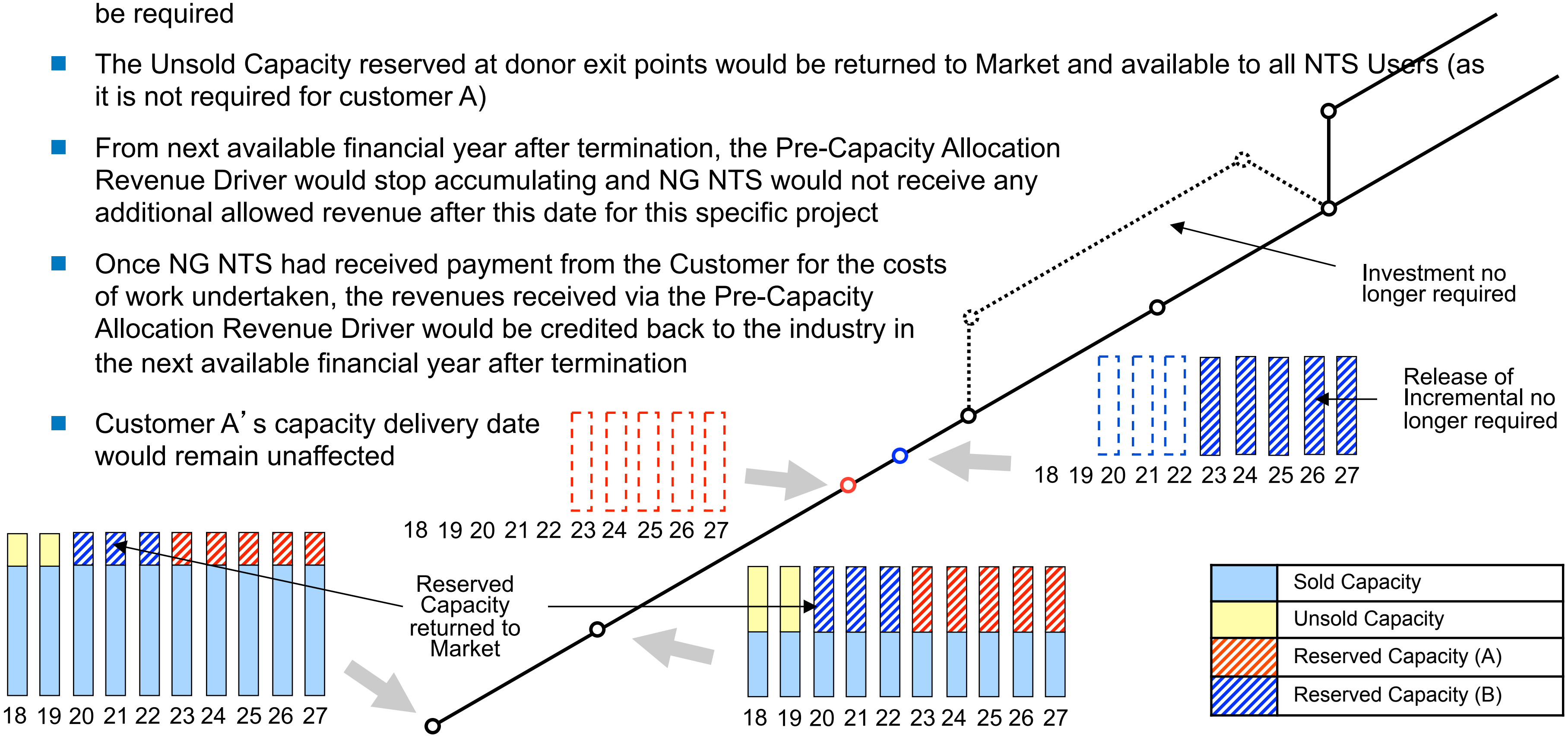
Under PARCA proposals

- Risks/Benefits for Customer A and B – financial commitment to capacity
  - Commercial capacity delivery timescales and NTS reinforcement delivery timescales better aligned – customer able to utilise commercial capacity rights from day 1.
  - Financial commitment to capacity occurs closer to first gas day
  - Potential to finesse capacity requirements to better align to actual need case
  - Increased security requirements
  - Use of "spare capacity" possible - facilitates earlier firm access to the NTS for customer B
- Risks/Benefits for all Users
  - Customers able to formally engage earlier - facilitates better NG forecasting and predictability of charges for all Users
  - No adjustments on Industry Transportation Charges until allocation of capacity
  - Potential for more efficient and economic build solution

Exit Example 2

What If…Customer B Cancels their PARCA?

- Should Customer B wish to cancel their PARCA during the Phase 2 works. NG NTS would stop work on developing the investment project immediately.
- We would invoice the Customer B for the total costs of work incurred and spend committed to at the time of termination. If this is not paid, or if the customer instructs NG NTS to utilise the security, we would draw down on the security provided by the Customer
- The reservation/release of Incremental Capacity at Customer B's exit point from 2023 onwards would no longer be required
- The Unsold Capacity reserved at donor exit points would be returned to Market and available to all NTS Users (as it is not required for customer A)
- From next available financial year after termination, the Pre-Capacity Allocation Revenue Driver would stop accumulating and NG NTS would not receive any additional allowed revenue after this date for this specific project
- Once NG NTS had received payment from the Customer for the costs of work undertaken, the revenues received via the Pre-Capacity Allocation Revenue Driver would be credited back to the industry in the next available financial year after termination
- Customer A's capacity delivery date would remain unaffected



Exit Example 2

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Customer Timelines

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023

Customer A

PARCA Signed

Unsold Capacity Reserved at Donor Exit Points (from Oct 2023 onwards)

No PARCA Phase 2 works required for Substitution

Capacity Allocation Date – Reserved Capacity substituted to Customer A Exit Point

Capacity Delivery Date

Customer B

PARCA Signed

Unsold Capacity Reserved at Donor Exit Points (for 2020, 2021 & 2022)

Incremental Capacity Reserved at Customer B's Exit Point (from 2023 onwards)

Customer B cancels PARCA

The Unsold Capacity reserved at donor exit points would be returned to Market and available to all NTS Users

The reservation / release of Incremental Capacity would no longer be required

NG NTS would invoice Customer B for the costs of works incurred and spend committed at the time of termination. If this is not paid, or if the customer instructs NG NTS to utilise the security, we would draw down on the security provided by the Customer

From next available financial year after termination, the Pre-Capacity Allocation Revenue Driver would stop accumulating and NG NTS would not receive any additional allowed revenue after this date for this specific project

Once NG NTS had recovered the total cost of work and committed spend from the Customer, this would be credited back to the industry via transportation charges

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Financial Impacts (following Bs termination)

Under Current Exit Application Arrangements

- Risks / Benefits for customer B
  - No contract termination clauses – financial User Commitment to capacity that may not be required
  - Termination is possible through voluntary discontinuance or insolvency only - potentially lead to perverse incentives to avoid payment of capacity charges
  - Security not required until 12 months prior to capacity delivery date
- Risks / Benefits for all Users
  - Permits may have been utilised / sought unnecessarily (Permit allowance funded by all users)
  - Buy back scheme may have been adjusted unnecessarily
  - Potential for unrecovered revenue being funded socially (increased transportation charges)
  - Lower security requirements - increased likelihood of bad debt

Under PARCA proposals

- Risks/Benefits for Customer B
- Allows termination of contract ahead of financial commitment to capacity (allocation).
  - Financial liability likely to be lower in the event of termination
- Risks/Benefits for all Users
  - Reduced potential for socialised funding of stranded capacity
  - No permit scheme under PARCA proposals
  - No unnecessary adjustment to buy back scheme
  - increased security requirements - less likelihood of bad debt

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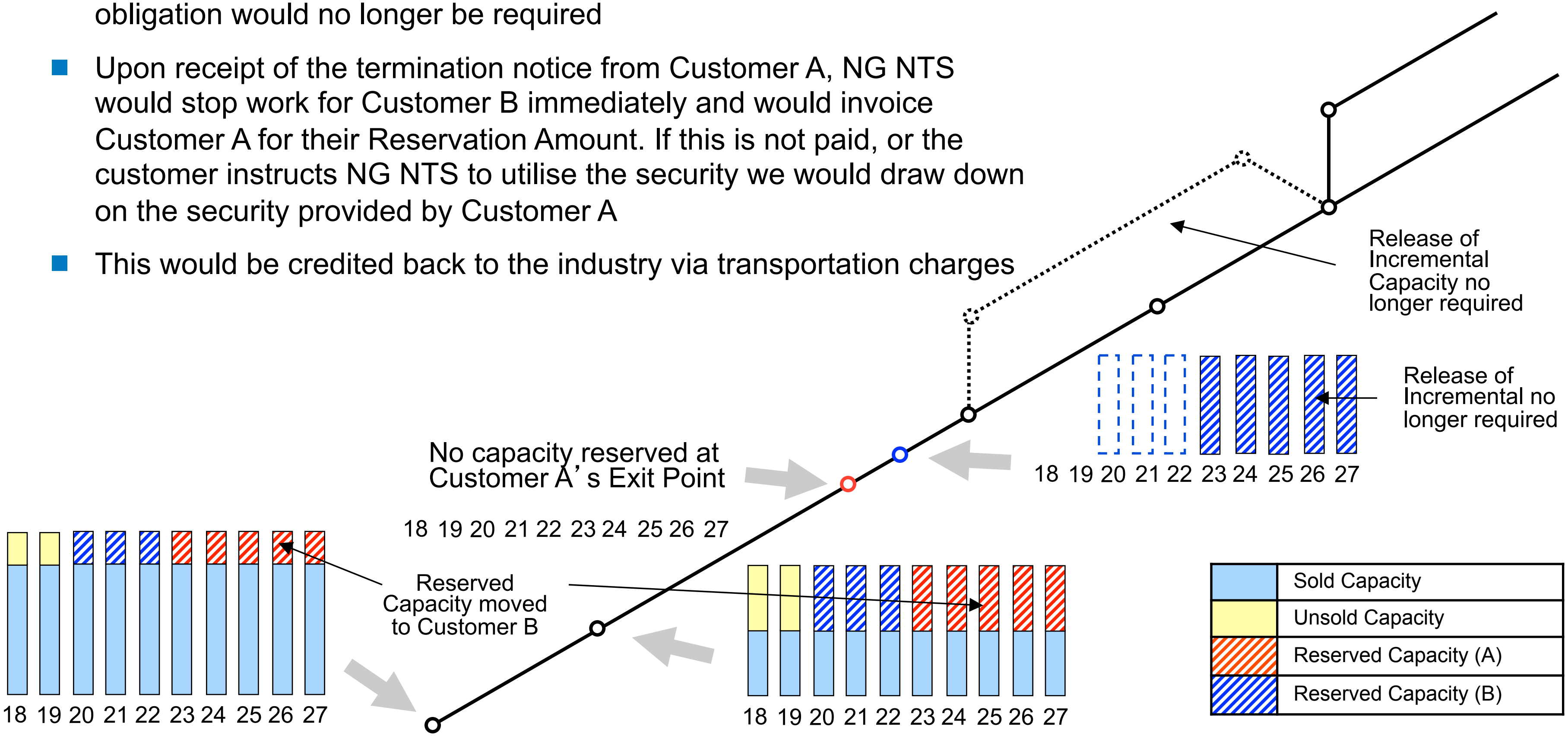
What If…Customer A Cancels their PARCA?

- Should Customer A cancel their PARCA whilst NG NTS is undertaking Phase 2 works for Customer B, the reservation / release of Incremental Capacity at Customer B's exit point would no longer be required as Customers A and B require the same quantity of capacity and the Substitutable Unsold Baseline Capacity reserved at donor exit points for Customer A (from 2023 onwards) could be "moved" to Customer B.
- Investment works to increase system capability and maintain NG NTS' 1:20 demand obligation would no longer be required
- Upon receipt of the termination notice from Customer A, NG NTS would stop work for Customer B immediately and would invoice Customer A for their Reservation Amount. If this is not paid, or the customer instructs NG NTS to utilise the security we would draw down on the security provided by Customer A
- This would be credited back to the industry via transportation charges



Exit Example 2

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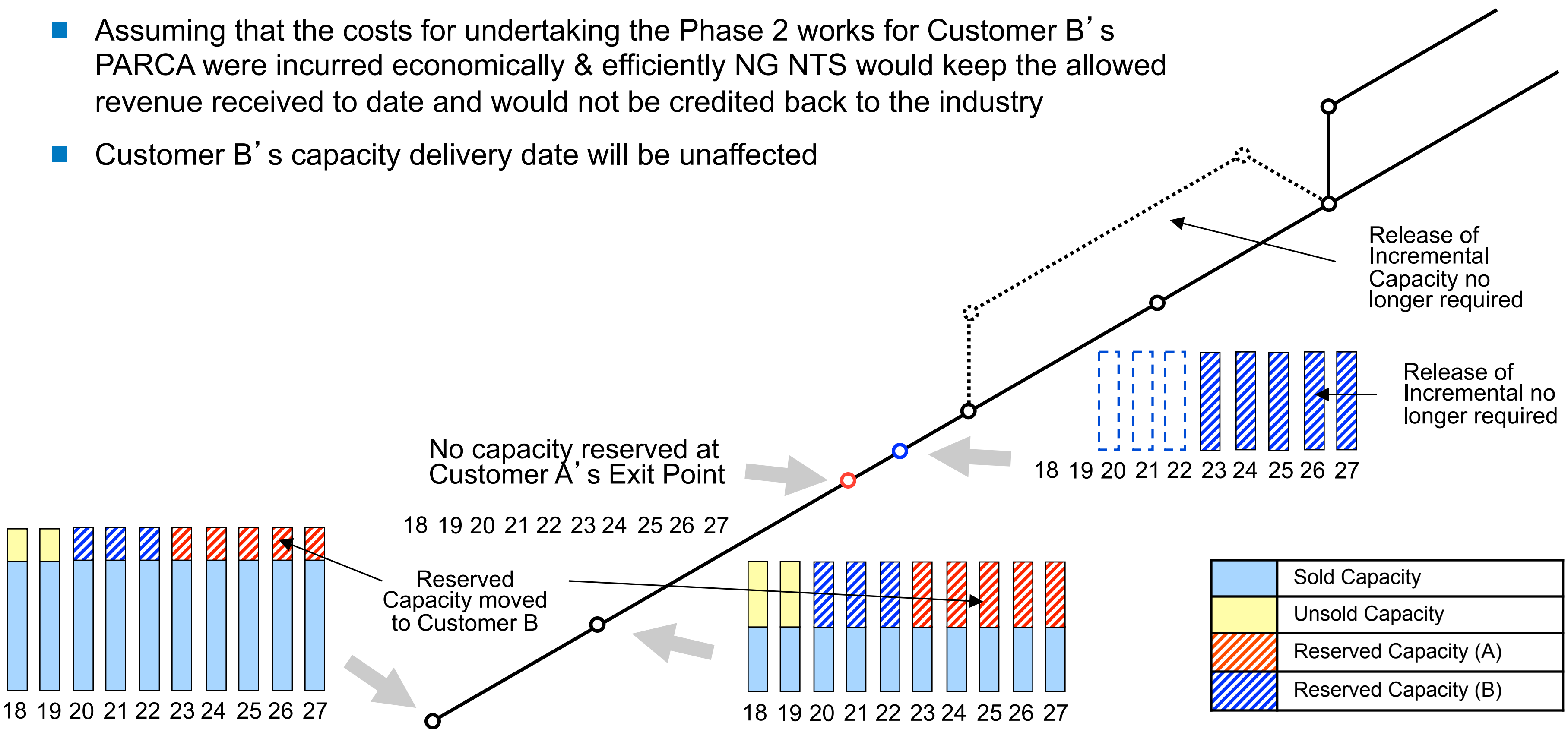
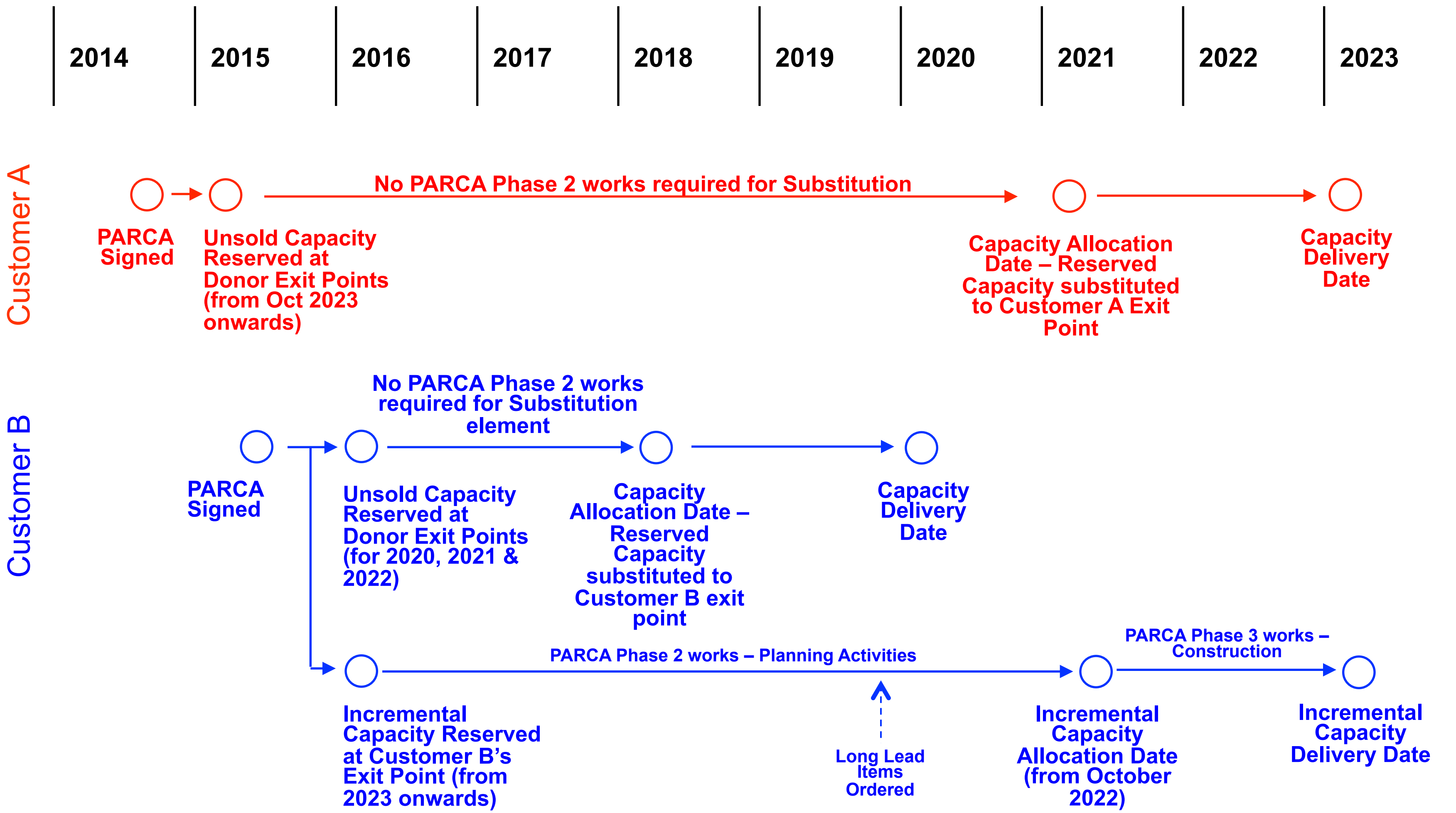
What If…Customer A Cancels their PARCA?

- Customer B’s security requirements would change as they would no longer be required to securitise the Pre-Capacity Allocation Revenue Driver and would be required to securitise the Reservation Amount for the unsold capacity to be substituted instead
- From the next available financial year after the termination of Customer A’s PARCA, the Pre-Capacity Allocation Revenue Driver for Customer B would stop accumulating and NG NTS would not receive any additional allowed revenue after this date for this specific project.
- Assuming that the costs for undertaking the Phase 2 works for Customer B’s PARCA were incurred economically & efficiently NG NTS would keep the allowed revenue received to date and would not be credited back to the industry
- Customer B’s capacity delivery date will be unaffected



Exit Example 2

Customer Timelines (as before)



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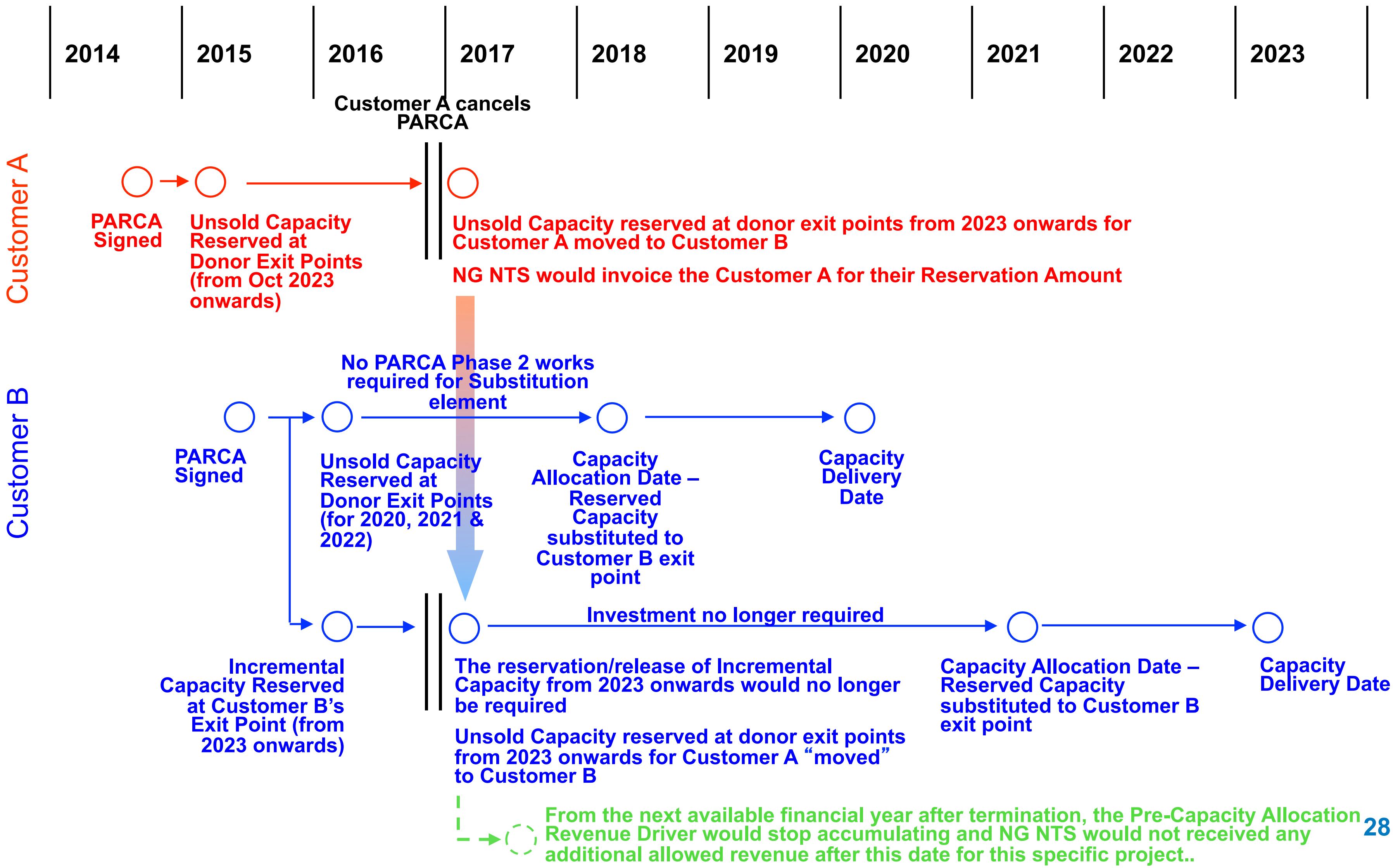
Customer Timelines (following A’s Termination)



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Financial Impacts (following As termination)

Under Current Exit Application Arrangements

- Risks / Benefits for customer A
  - No contract termination clauses – financial User Commitment to capacity that may not be required
  - Termination is possible through voluntary discontinuance or insolvency only - potentially lead to perverse incentives to avoid payment of capacity charges
  - Security not required until 12 months prior to capacity delivery date
- Risks / Benefits for customer B
  - Potential for inefficient investment to deliver customer B capacity
- Risks / Benefits for all Users
  - Permits may have been utilised / sought unnecessarily (Permit allowance funded by all users)
  - Buy back scheme may have been adjusted unnecessarily
  - Potential for unrecovered revenue being funded socially (increased transportation charges)
  - Lower security requirements - increased likelihood of bad debt

Under PARCA proposals

- Risks/Benefits for Customer A
- Allows termination of contract ahead of financial commitment to capacity (allocation).
  - Financial liability likely to be lower in the event of termination
- Risks/Benefits for Customer B
  - Potential for lower security to be provided and earlier delivery of required capacity
- Risks/Benefits for all Users
  - Reduced potential for socialised funding of stranded capacity
  - No permit scheme under PARCA proposals
  - No unnecessary adjustment to buy back scheme
  - Increased security requirements - less likelihood of bad debt

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Entry Example 1

A single customer requiring incremental entry capacity & investment

A Single Customer

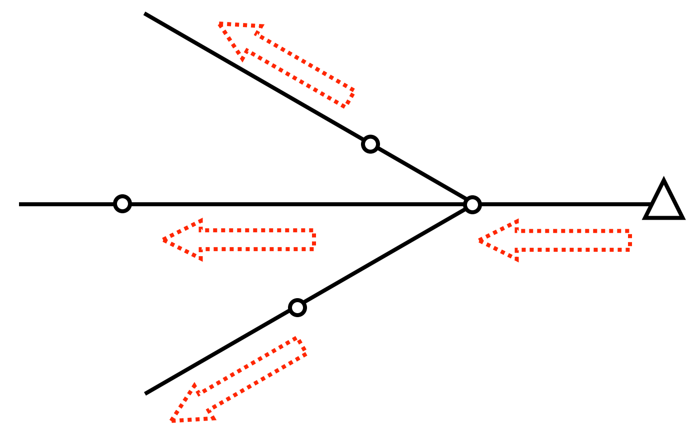
- A Customer requires entry capacity from October 2021 and approaches NG NTS in 2014.
- The Customer signs a PARCA and pays the Phase 1 fee
- Within 10 days of initiation of Phase 1, NG NTS will publish the ASEP, an indicative range of Entry Capacity based upon the maximum requested & an indicative Capacity Reservation Date
- NG NTS undertakes the Phase 1 works and determines the following:

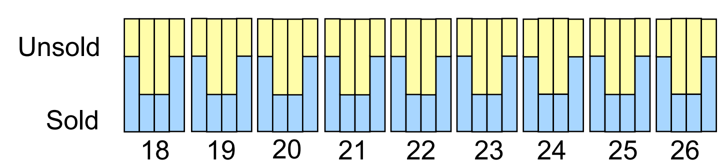
✓ There is insufficient unsold capacity at the relevant ASEP to meet the Customer's capacity requirement

✓ There is no substitutable unsold capacity at interactive ASEPs

✓ The release of Incremental Capacity is therefore required

✓ NG NTS determines that the most appropriate means of providing the Incremental Capacity is investment (as opposed to a commercial arrangement or by managing increased constraint risk) & identifies that the earliest that investment can be provided is 2021





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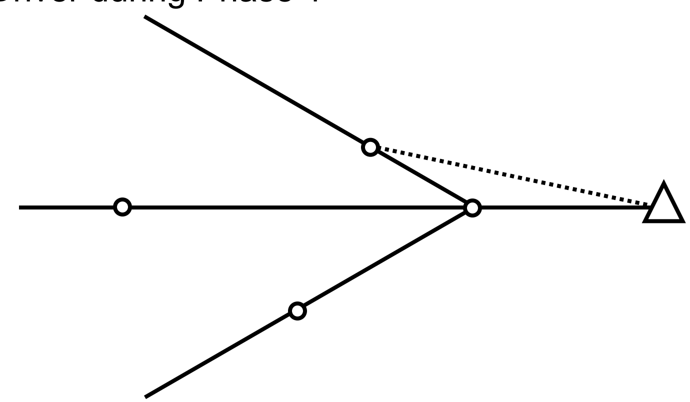
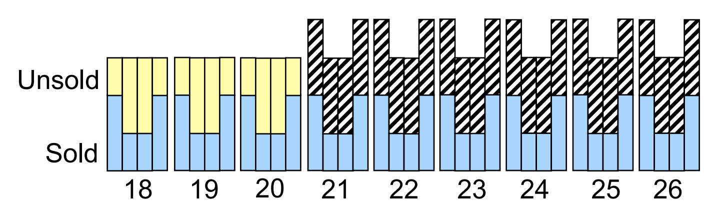
A Single Customer

- The appropriate Phase 1 Outputs are issued to the Customer
- The Phase 1 outputs will include the following - Investment Need Case Report, Technical Options Report, Indicative Capacity Reservation Date, Indicative Capacity Allocation Date, Indicative Capacity Delivery Date, Indicative Capacity Charges, Indicative Security Amount, Quantity of Capacity to be Reserved, Demo Info & Date Requirements
- For this Customer, as investment is required, the Indicative Security Amount will be equal to the Pre-Capacity Allocation Revenue Driver which will be reflective of the anticipated costs for undertaking all planning works up to obtaining planning permission
- NG NTS will calculate the Pre- Capacity Allocation Revenue Driver during Phase 1
- Following the completion of the Phase 1 cost reconciliation, the Customer confirms that they wish to proceed to Phase 2
- The Customer provides the required level of security and the incremental capacity at the ASEP is reserved from October 2021
- The Capacity Allocation Date, where the Reserved Capacity will be allocated to the Customer is set at October 2019
- The Capacity Delivery Date is set at October 2021
- In order to continue reserving the capacity Customer A must continue to provide security and meet the demonstration info requirements specified in their PARCA





Entry Example 1

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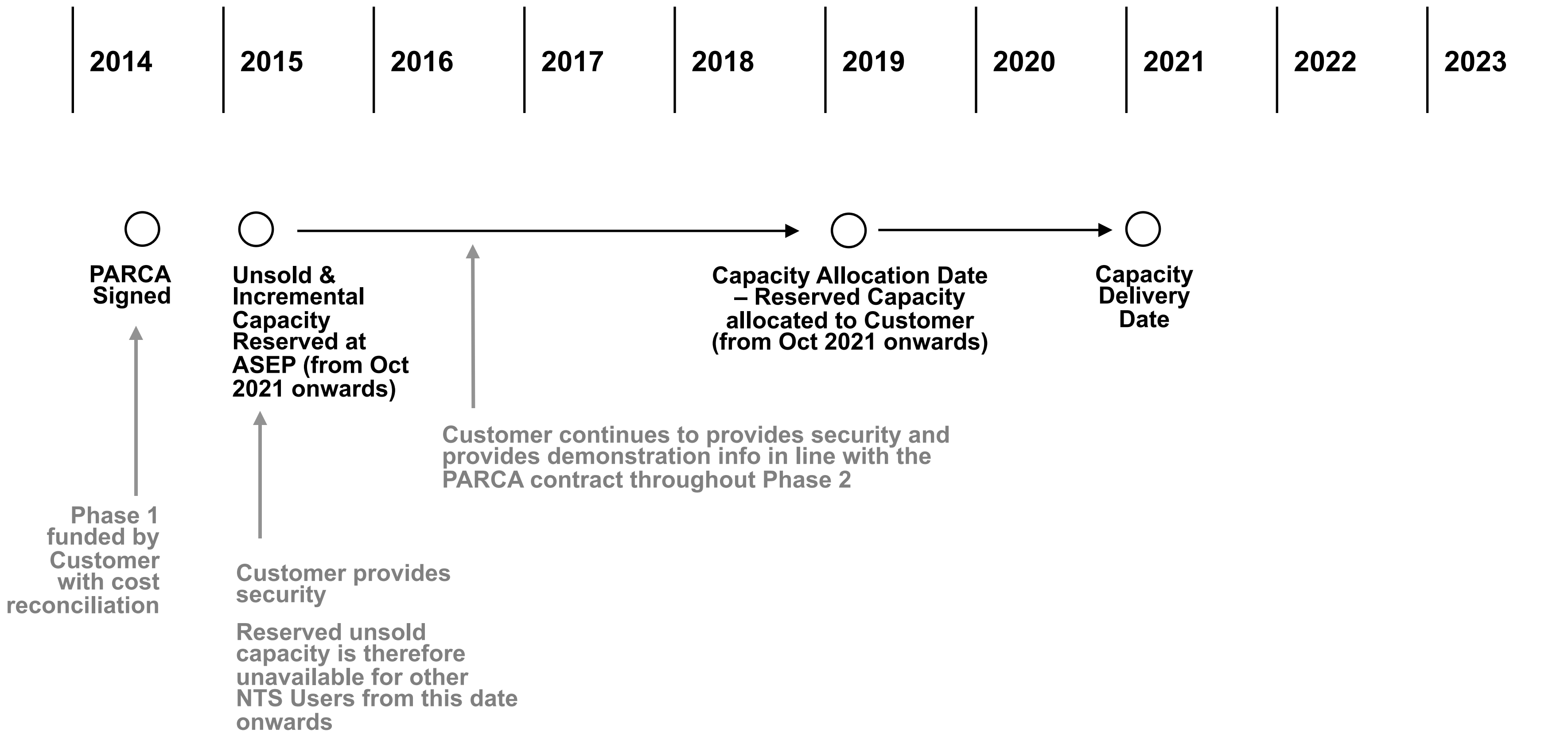
Customer Timeline



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Financial Impacts – Single Customer (no termination)

Under Current Exit Application Arrangements

- Risks/Benefits for Customer
  - Financial User Commitment to capacity occurs earlier - less certainty of the capacity quantity required and the date it is required from
  - May not be able to utilise commercial capacity i.e. misalignment between commercial capacity delivery and physical reinforcement
  - Security not required until 12 months prior to capacity delivery date
- Risks/Benefits for all Users
  - Greater potential for constraint management costs
  - Potential for less efficient build solution and increased charges

Under PARCA proposals

- Risks/Benefits for Customer
  - Commercial capacity delivery timescales and NTS reinforcement delivery timescales aligned – customer able to utilise commercial capacity rights from day 1.
  - Financial commitment to capacity occurs closer to first gas day
  - Potential to finesse capacity quantity to better align to actual need case
  - Increased security requirements
- Risks/Benefits for all Users
  - Customers able to formally engage earlier - facilitates better NG forecasting and predictability of charges for all Users
  - No adjustments on Industry Transportation Charges until allocation of capacity
  - Potential for more efficient and economic build solution

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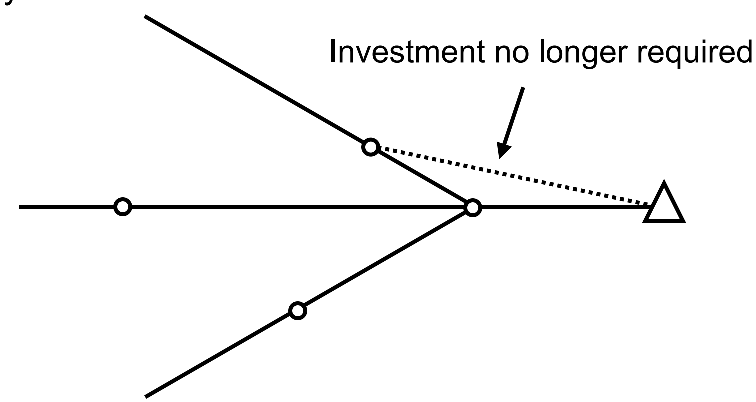
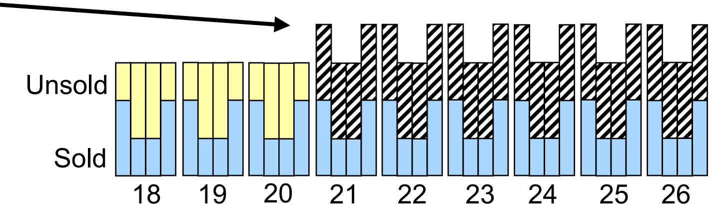
What If…the Customer Cancels their PARCA?

- Should the Customer wish to cancel their PARCA during the Phase 2 works. NG NTS would stop work on developing the investment project immediately.
- We would invoice the Customer for the total cost of work incurred and spend committed to at the time of termination. If this is not paid, or if the customer instructs NG NTS to utilise the security, we would draw down on the security provided by the Customer.
- The reservation/release of Incremental Capacity at the ASEP from 2021 onwards would no longer be required.
- From the next available financial year after termination, the Pre-Capacity Allocation Revenue Driver would stop accumulating and NG NTS would not received any additional allowed revenue after this date for this specific project.
- Once NG NTS had recovered the total cost of work and committed spend from the Customer, this would be credited back to the industry via transportation charges



The reservation/release of Incremental Capacity at the ASEP from 2021 onwards would no longer be required.



Entry Example 1

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Customer Timeline

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023

Customer cancels PARCA

PARCA Signed

Unsold & Incremental Capacity Reserved at ASEP (from Oct 2021 onwards)

The reserved unsold capacity at the ASEP would be returned to the market

The reservation/release of Incremental Capacity from 2021 onwards would no longer be required

NG NTS would invoice the Customer for the costs of works incurred and committed to at the time of termination. If this is not paid, or if the customer instructs NG NTS to utilise the security, we would draw down on the security provided by the Customer.

From the next available financial year after termination, the Pre-Capacity Allocation Revenue Driver would stop accumulating and NG NTS would not received any additional allowed revenue after this date for this specific project.

Once NG NTS had recovered the total cost of work and committed spend from the Customer, this would be credited back to the industry via transportation charges

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Financial Impacts (following termination)

Under Current Exit Application Arrangements

- Risks / Benefits for Customer
  - No contract termination clauses – financial User Commitment to capacity that may not be required
  - Termination is possible through voluntary discontinuance or insolvency only - potentially lead to perverse incentives to avoid payment of capacity charges
  - Security not required until 12 months prior to capacity delivery date
- Risks / Benefits for all Users
  - Permits may have been utilised / sought unnecessarily (Permit allowance funded by all users)
  - Buy back scheme may have been adjusted unnecessarily
  - Potential for unrecovered revenue being funded socially (increased transportation charges)
  - Lower security requirements - increased likelihood of bad debt

Under PARCA proposals

- Risks/Benefits for Customer
- Allows termination of contract ahead of financial User commitment to capacity
  - Financial liability likely to be lower in the event of termination
- Risks/Benefits for all Users
  - Reduced potential for socialised funding of stranded capacity
  - No permit scheme under PARCA proposals
  - No unnecessary adjustment to buy back scheme
  - Increased security requirements - less likelihood of bad debt

Entry Example 2

An PARCA scenario, with two customers requiring entry capacity at an ASEP where unsold capacity is available for one customer only

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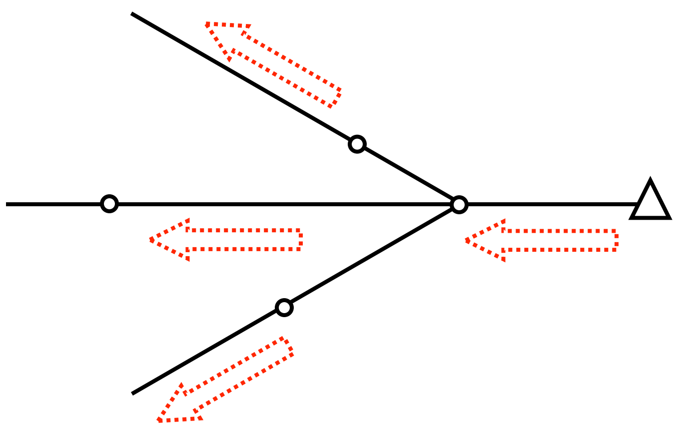
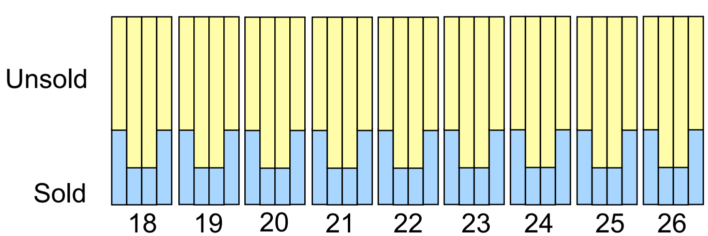
Customer A

- Customer A requires entry capacity from October 2019 and approaches NG NTS in 2014.
- Customer A signs a PARCA and pays the Phase 1 fee
- Within 10 days of initiation of Phase 1, NG NTS will publish the ASEP, an indicative range of Entry Capacity based upon the maximum requested & an indicative Capacity Reservation Date
- NG NTS undertakes the Phase 1 works and determines the following:
- ✓ Customer A's capacity requirement can be fully provided via unsold capacity at the relevant ASEP and therefore Phase 2 works are not required
- ✓ Customer A could have secured this capacity through the QSEC Auction however the Reservation element of the PARCA allows them to obtain capacity without having to fully commit to the formal Capacity booking whilst they pursue planning permission
- The appropriate Phase 1 Outputs are issued to Customer A
- The Phase 1 outputs will include the following - Investment Need Case Report, Technical Options Report, Indicative Capacity Reservation Date, Indicative Capacity Allocation Date, Indicative Capacity Delivery Date, Indicative Capacity Charges, Indicative Security Amount, Quantity of Capacity to be Reserved, Demo Info & Date Requirements





Customer A

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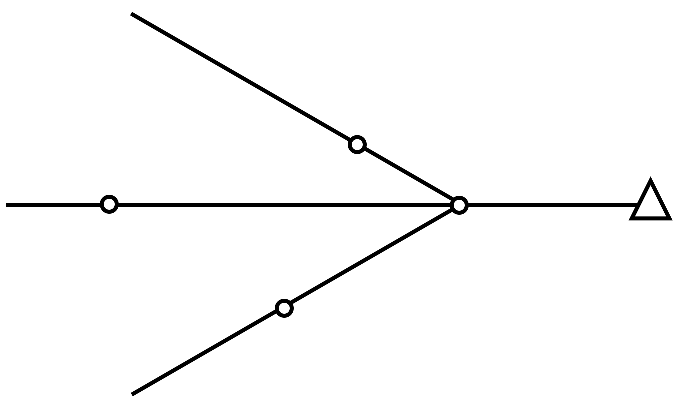
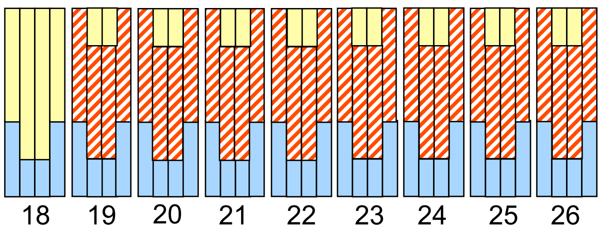
- For this Customer, as investment is not required, the Indicative Security Amount will be the Capacity Reservation Amount which will be equal to 10% of indicative User Commitment based upon the NPV test calculation.
- A Pre-Capacity allocation Revenue Driver will not be required as no investment is required
- Following the completion of the Phase 1 cost reconciliation, Customer A confirms that they wish to proceed to Phase 2 in order to reserve the capacity
- Customer A provides security for the reservation amount and the unsold capacity at the ASEP is reserved from October 2019 and is therefore unavailable for other NTS Users from this date onwards
- The Capacity Allocation Date is set at October 2017
- The Capacity Delivery Date for Customer A is set at October 2019





Entry Example 2

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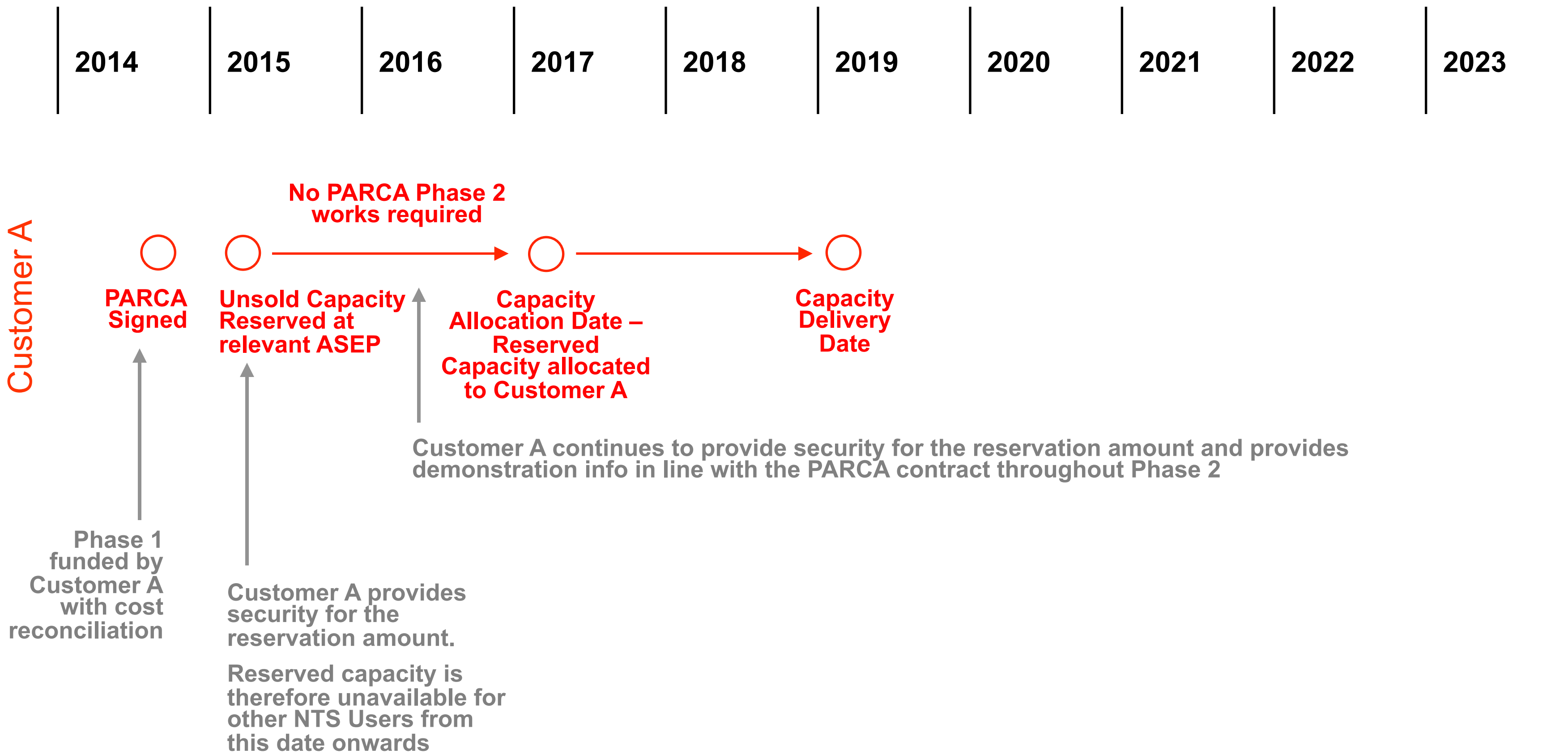
Customer A Timeline



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Customer B

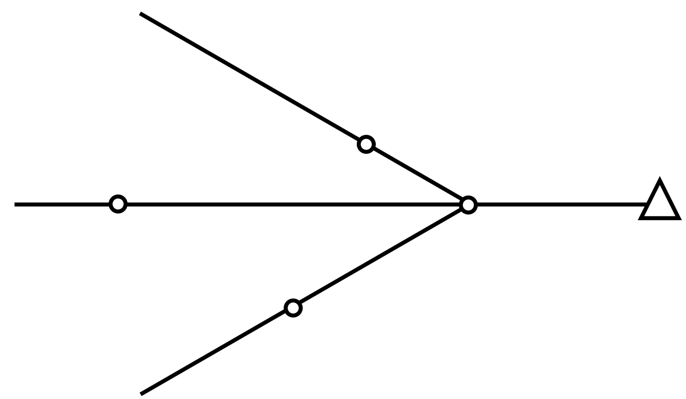
- Customer B requires a smaller quantity of entry capacity than Customer A at the same ASEP from October 2020 and approaches NG NTS in 2015 (One year later)
- NG NTS undertakes the Phase 1 works and determines the following:

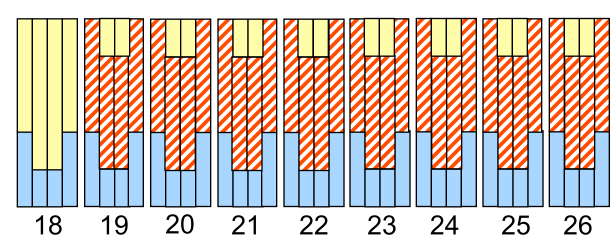
✓ Whilst there is some unsold capacity available in some quarters at the ASEP, given the Capacity previously reserved for Customer A, there is insufficient unsold capacity in all quarters to meet Customer B's capacity requirements.

✓ There is no substitutable unsold capacity at interactive ASEPs which could be used

✓ Therefore the reservation of the remaining unsold plus the release of Incremental Capacity is required

- National Grid determines that the most appropriate means of providing the Incremental Capacity is investment (as opposed to a commercial arrangement or by managing increased constraint risk) & identifies that the earliest that investment can be provided is 2023
- The appropriate Phase 1 Outputs are issued to Customer B
- The Phase 1 outputs will include the following - Investment Need Case Report, Technical Options Report, Indicative Capacity Reservation Date, Indicative Capacity Allocation Date, Indicative Capacity Delivery Date, Indicative Capacity Charges, Indicative Security Amount, Quantity of Capacity to be Reserved, Demo Info & Date Requirements





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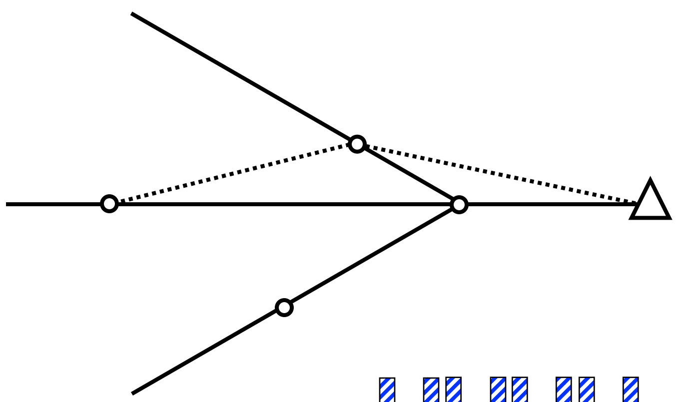
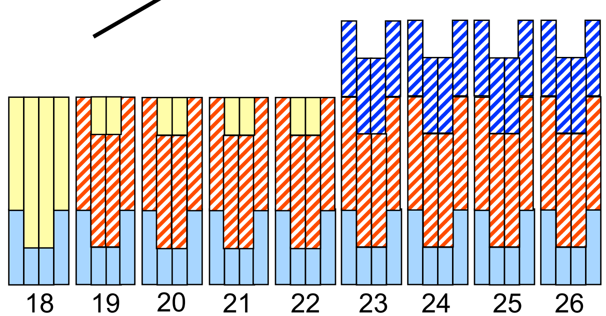
Customer B

- For Customer B, as investment is required, the Indicative Security Amount will be equal to the Pre-Capacity Allocation Revenue Driver which will be reflective of the anticipated costs for undertaking all planning works up to obtaining planning permission
- Customer B would not be required to securitise the Reservation Amount for the unsold capacity to be reserved as they would be providing the security described above
- NG NTS will calculate the Pre- Capacity Allocation Revenue Driver during Phase 1
- Following the completion of the Phase 1 cost reconciliation, Customer B confirms that they wish to proceed to Phase 2
- Customer B provides the required level of security and the incremental capacity at the ASEP is reserved from October 2023
- The Capacity Allocation Date, where the Reserved Capacity will be allocated to the Customer is set at October 2021
- The Capacity Delivery Date is set at October 2023
- NG NTS undertake Phase 2 Works
- In order to continue reserving the capacity Customer B must continue to provide security and meet the demonstration info requirements specified in their PARCA





Entry Example 2

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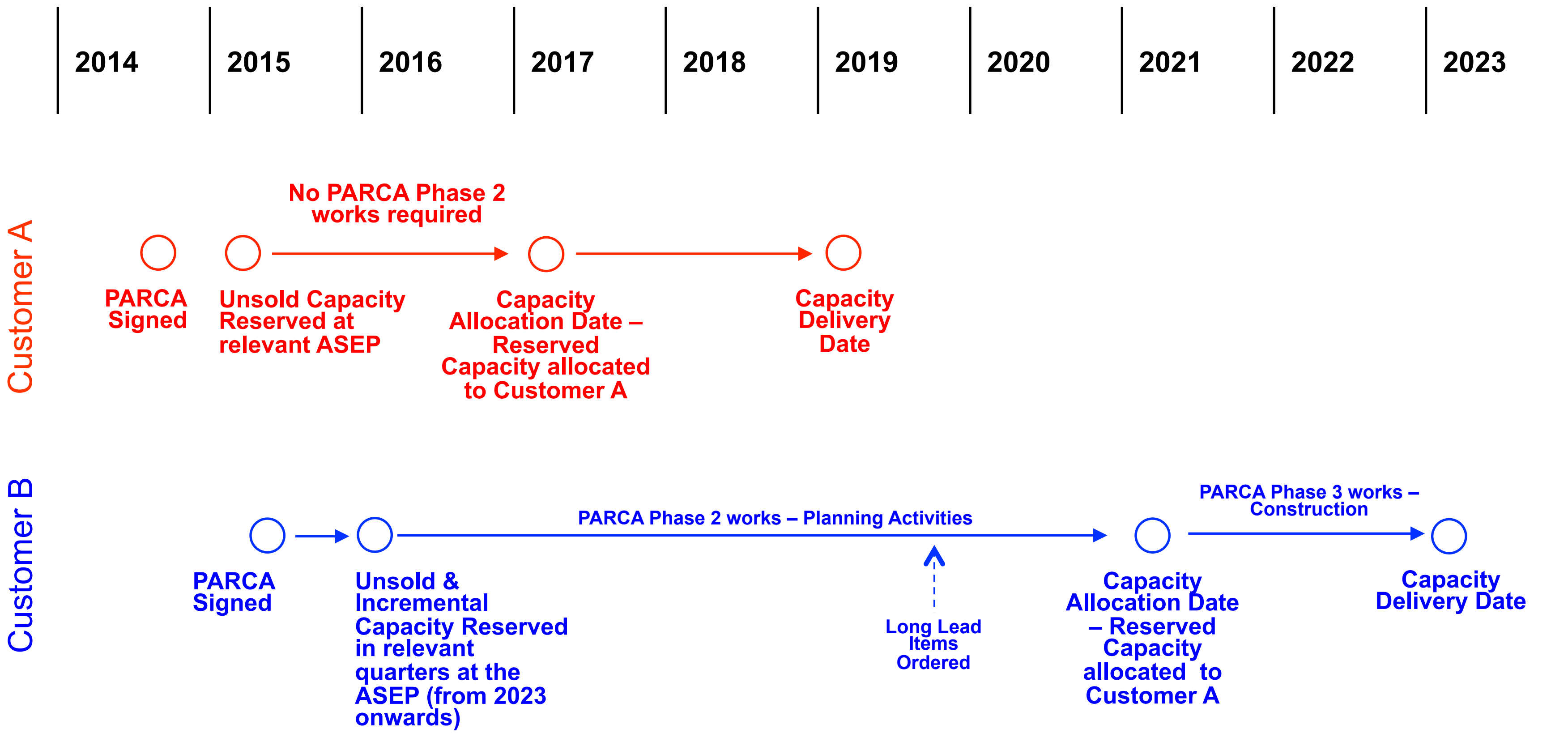
Customers Timelines



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Financial Impacts

Under Current Exit Application Arrangements

- Risks/Benefits for Customers A and B
  - Financial User Commitment to capacity occurs earlier - less certainty of the capacity quantity required and the date it is required from
  - May not be able to utilise commercial capacity i.e. misalignment between commercial capacity delivery and physical reinforcement
  - Security not required until 12 months prior to capacity delivery date
- Risks/Benefits for all Users
  - Greater potential for constraint management costs
  - Potential for less efficient build solution and increased charges

Under PARCA proposals

- Risks/Benefits for Customer A and B – financial commitment to capacity
  - Commercial capacity delivery timescales and NTS reinforcement delivery timescales better aligned – customer able to utilise commercial capacity rights from day 1.
  - Financial commitment to capacity occurs closer to first gas day
  - Potential to finesse capacity requirements to better align to actual need case
  - Increased security requirements
- Risks/Benefits for all Users
  - Customers able to formally engage earlier - facilitates better NG forecasting and predictability of charges for all Users
  - No adjustments on Industry Transportation Charges until allocation of capacity
  - Potential for more efficient and economic build solution

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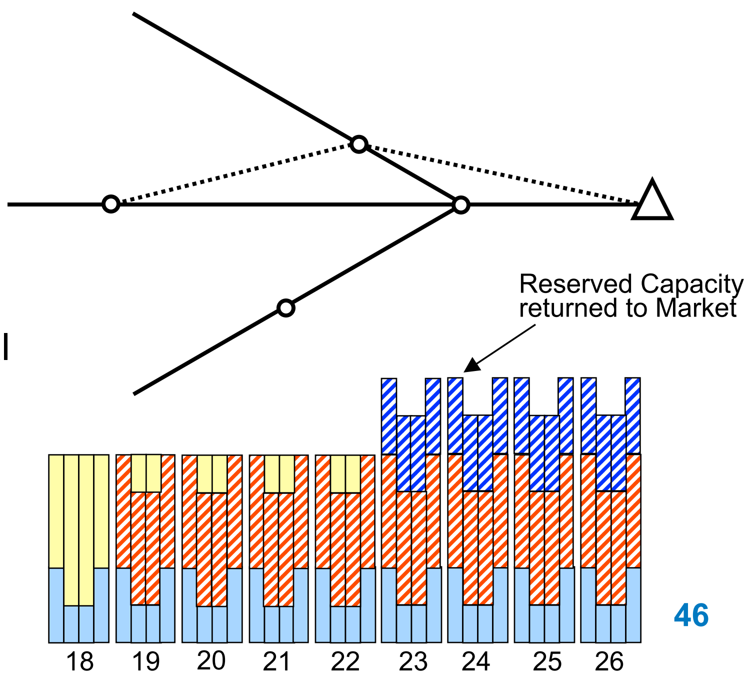
What If… Customer B Cancels its PARCA?

- Should Customer B wish to cancel their PARCA during the Phase 2 works. NG NTS would stop work on developing the investment project immediately.
- We would invoice the Customer B for the total costs of work incurred and spend committed to at the time of termination. If this is not paid, or if the customer instructs NG TS to utilise the security, we would draw down on the security provided by Customer B.
- The reservation / release of Incremental Capacity at the ASEP from 2023 onwards would no longer be required
- From next available financial year after termination, the Pre-Capacity Allocation Revenue Driver would stop accumulating and NG NTS would not receive any additional allowed revenue after this date for this specific project
- Once NG NTS had received payment from the Customer for the costs of work undertaken, the revenues received via the Pre-Capacity Allocation Revenue Driver would be credited back to the industry in the next available financial year after termination
- Customer A's capacity delivery date would remain unaffected



Entry Example 2

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Customer Timelines

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023

Customer A

No PARCA Phase 2 works required

PARCA Signed

Unsold Capacity Reserved at relevant ASEP

Capacity Allocation Date – Reserved Capacity allocated to Customer A

Capacity Delivery Date

Customer B

Customer B cancels PARCA

PARCA Signed

Unsold & Incremental Capacity Reserved in relevant quarters at the ASEP (from 2023 onwards)

The reserved unsold capacity would be returned to the market

The reservation / release of Incremental Capacity is no longer required

NG NTS would invoice the Customer for the costs of works incurred and committed to at the time of termination. If this is not paid, or if the customer instructs NG NTS to utilise the security, we would draw down on the security provided by the Customer.

From the next available financial year after termination, the Pre-Capacity Allocation Revenue Driver would stop accumulating and NG NTS would not received any additional allowed revenue after this date for this specific project.

Once NG NTS had recovered the total cost of work from the Customer, this would be credited back to the industry via transportation charges

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Financial Impacts (following Bs termination)

Under Current Exit Application Arrangements

- Risks / Benefits for customer B
  - No contract termination clauses – financial User Commitment to capacity that may not be required
  - Termination is possible through voluntary discontinuance or insolvency only - potentially lead to perverse incentives to avoid payment of capacity charges
  - Security not required until 12 months prior to capacity delivery date
- Risks / Benefits for all Users
  - Permits may have been utilised / sought unnecessarily (Permit allowance funded by all users)
  - Buy back scheme may have been adjusted unnecessarily
  - Potential for unrecovered revenue being funded socially (increased transportation charges)
  - Lower security requirements - increased likelihood of bad debt

Under PARCA proposals

- Risks/Benefits for Customer B
- Allows termination of contract ahead of financial commitment to capacity (allocation).
  - Financial liability likely to be lower in the event of termination
- Risks/Benefits for all Users
  - Reduced potential for socialised funding of stranded capacity
  - No permit scheme under PARCA proposals
  - No unnecessary adjustment to buy back scheme
  - increased security requirements - less likelihood of bad debt

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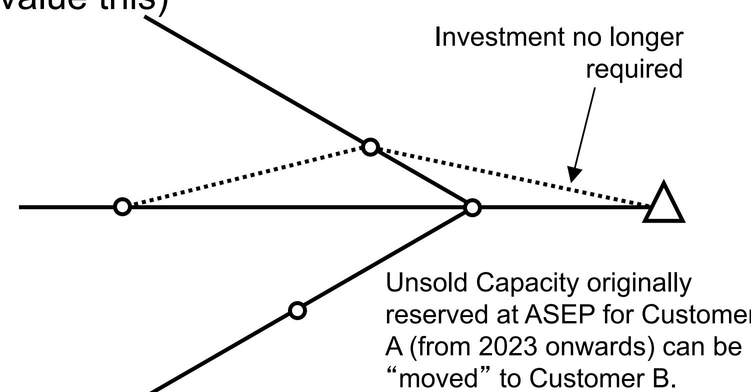
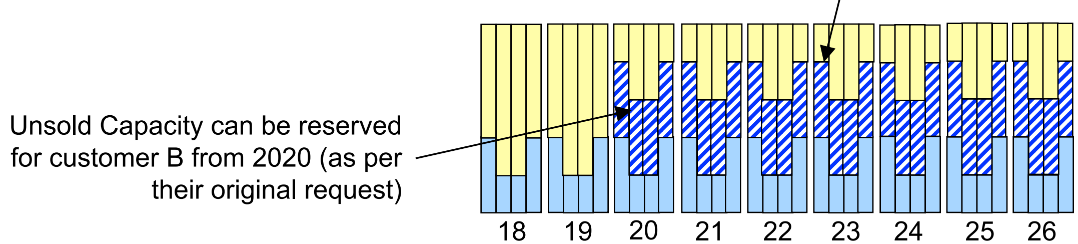
What If… Customer A Cancels its PARCA

- Should Customer A cancel their PARCA whilst NG NTS is undertaking Phase 2 works for Customer B the reservation / release of Incremental Capacity at the ASEP would no longer be required as Customers B requires less capacity than Customer A and hence a quantity of the Unsold Baseline Capacity reserved for Customer A (from 2023 onwards) could be “moved” to Customer B and the remainder returned to the market
- Investment works to increase system capability would no longer be required
- Also in this case, as Customer B had originally required Capacity from Oct 2020, Unsold Capacity could now be reserved for 2020, 2021 and 2022 for Customer B, bringing forward their Capacity Delivery Date by 3 years (should the customer value this)
- This is assuming that the appropriate capacity allocation date for a capacity delivery date of Oct 2020 (Oct 2018) had not already passed and that this was allowed under the terms of the PARCA (demo info provided etc)





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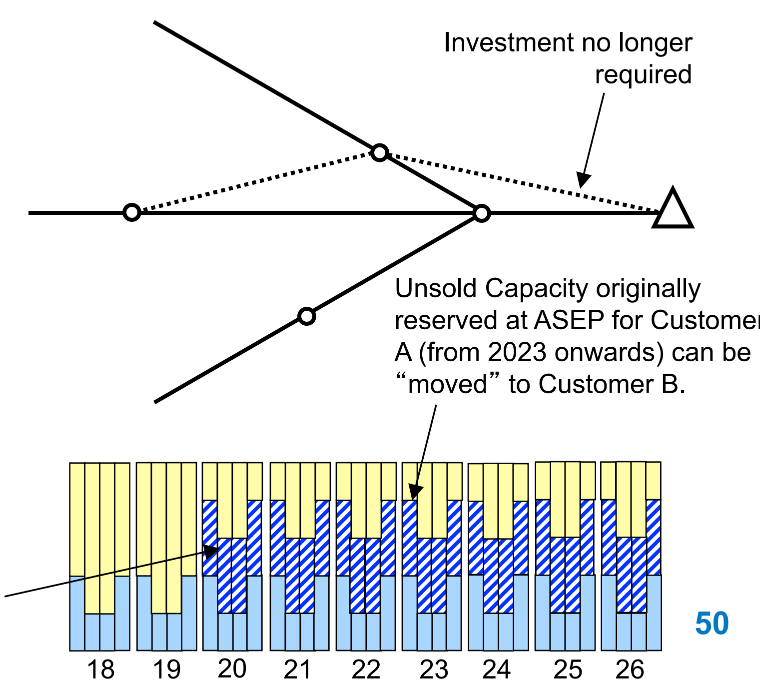
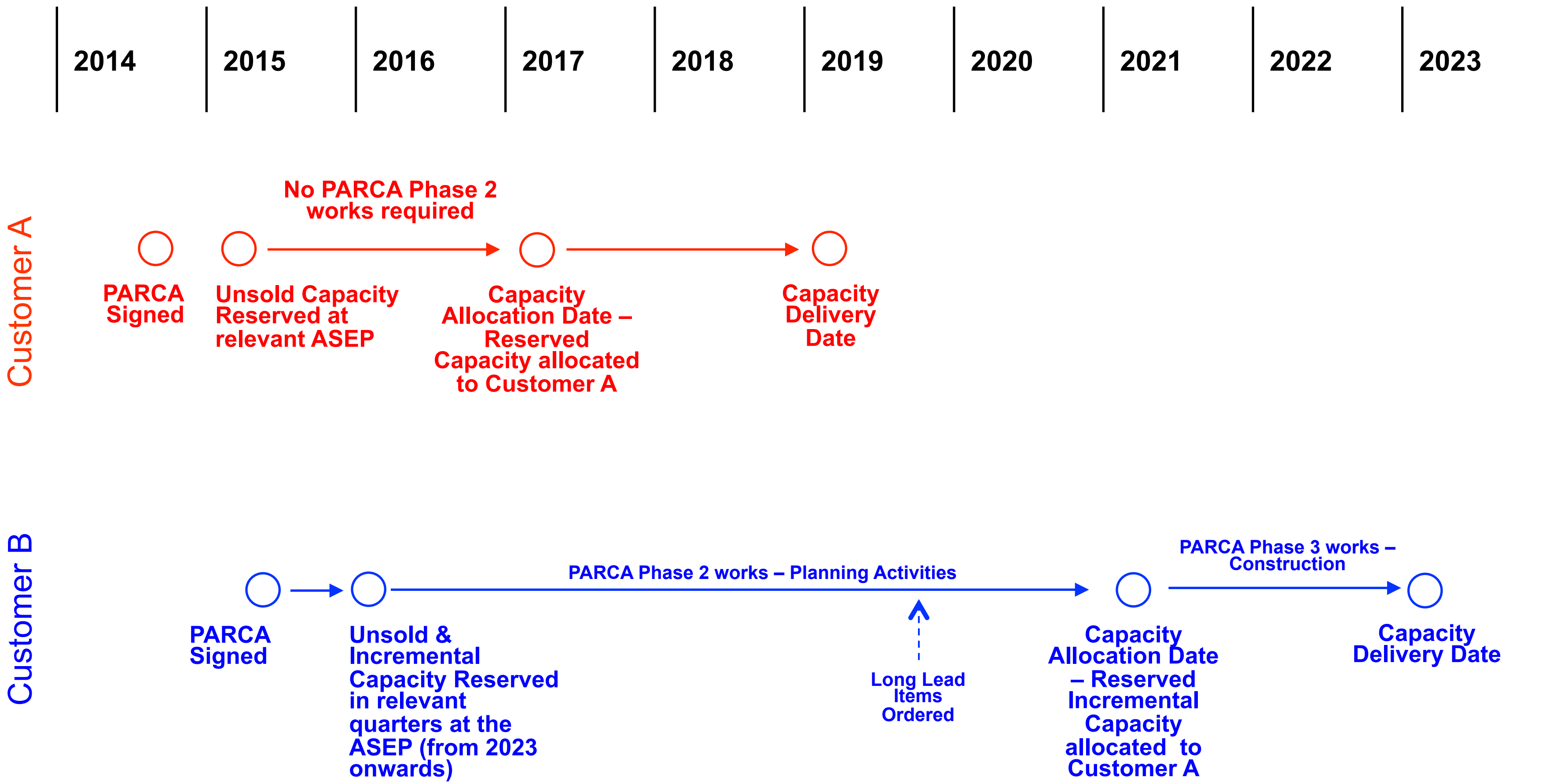
What If… Customer A Cancels its PARCA

- Upon receipt of the termination notice from Customer A, NG NTS would stop work for Customer B immediately and would invoice Customer A for their Reservation Amount. If this is not paid, or the customer instructs NG NTS to utilise the security, we would draw down on the security provided by Customer A
- This would be credited back to the industry via transportation charges
- Customer B’s security requirements would change as they would no longer be required to securitise the Pre-Capacity Allocation Revenue Driver and would be required to securitise the Reservation Amount for the unsold capacity instead
- From the next available financial year after the termination of Customer A’s PARCA, the Pre-Capacity Allocation Revenue Driver for Customer B would stop accumulating and NG NTS would not receive any additional allowed revenue after this date for this specific project
- Assuming that the costs for undertaking the Phase 2 works for Customer B’s PARCA were incurred economically & efficiently NG NTS would keep the allowed revenue received to date and would not be credited back to the industry



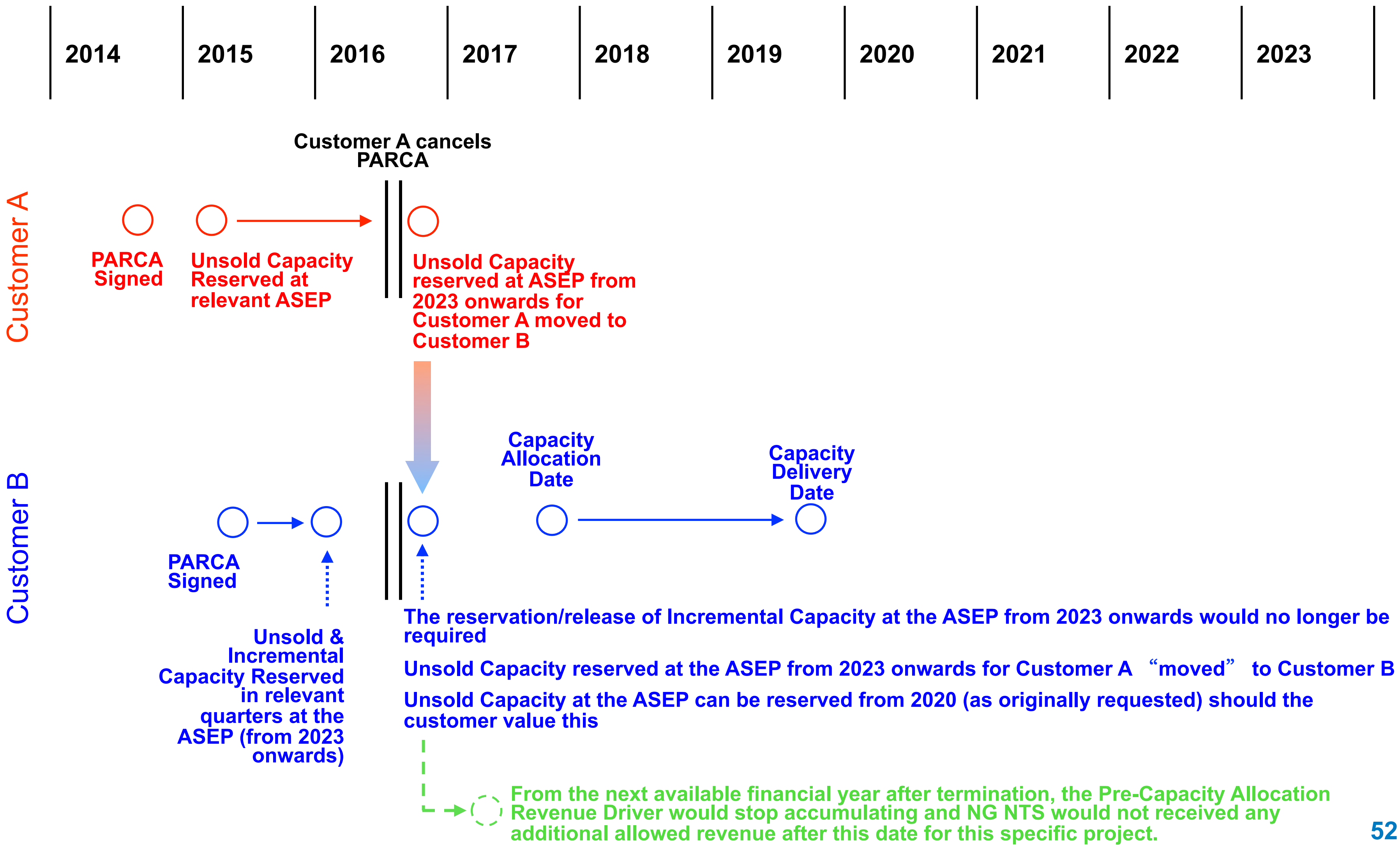
Entry Example 2

Customer Timelines (as before)



Entry Example 2

Customer Timelines



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Financial Impacts (following As termination)

Under Current Exit Application Arrangements

- Risks / Benefits for customer A
  - No contract termination clauses – financial User Commitment to capacity that may not be required
  - Termination is possible through voluntary discontinuance or insolvency only - potentially lead to perverse incentives to avoid payment of capacity charges
  - Security not required until 12 months prior to capacity delivery date
- Risks / Benefits for customer B
  - Potential for inefficient investment to deliver customer B capacity
- Risks / Benefits for all Users
  - Permits may have been utilised / sought unnecessarily (Permit allowance funded by all users)
  - Buy back scheme may have been adjusted unnecessarily
  - Potential for unrecovered revenue being funded socially (increased transportation charges)
  - Lower security requirements - increased likelihood of bad debt

Under PARCA proposals

- Risks/Benefits for Customer A
- Allows termination of contract ahead of financial commitment to capacity (allocation).
  - Financial liability likely to be lower in the event of termination
- Risks/Benefits for Customer B
  - Potential for lower security to be provided and earlier delivery of required capacity
- Risks/Benefits for all Users
  - Reduced potential for socialised funding of stranded capacity
  - No permit scheme under PARCA proposals
  - No unnecessary adjustment to buy back scheme
  - Increased security requirements - less likelihood of bad debt