

## SECTION 1: Detailed Assessment of Impacts of COVID-19 GB Lockdown on Settlement, AQ, Charging Rates

### Background Notes

1. Please see also material presented at UNC Distribution Workgroup on 26 March 2020
2. The list of impacts provides a simplified view – **not all sites within a customer group will:**
  - Follow a consistent pattern (e.g. not all Domestic sites will see an increase)
  - Exhibit changed behaviours at exactly the same times
  - Return to pre-lockdown levels at the same time
  - Return to pre-lockdown levels in the short/medium term
3. Rolling AQs will only react slowly – and only if meter readings are received and pass tolerance checks
4. The list of options is not necessarily comprehensive
5. None of the options listed has been costed or had a systems impact assessment

## SECTION 1: Detailed Assessment of Impacts of COVID-19 GB Lockdown on Settlement, AQ, Charging Rates

IMPACTS DURING LOCKDOWN						
	Class 1/2			Class 3/4		
	Usage Increases During Lockdown	Usage Decreases During Lockdown	Notes	Usage Increases During Lockdown	Usage Decreases During Lockdown	Notes
<b>Nominations</b>	Unaffected	Unaffected	<i>Assumes usage information still available</i>	Understated	Overstated	<i>Opposite effect on UIG</i>
<b>Allocations</b>	Unaffected	Unaffected	<i>Assumes daily reads still flow</i>	Understated	Overstated	<i>Opposite effect on UIG</i>
<b>Meter reading submission</b>	Read rejections are possible if usage increases sharply	No impacts	<i>The larger the AQ, the tighter the read tolerances</i>	Read rejections are possible if usage increases very sharply	No impacts	<i>The larger the AQ, the tighter the read tolerances</i>
<b>Read Estimation</b>	Unaffected	Unaffected	<i>Assumes this is a new read issue, not ongoing</i>	Understated if lockdown days are included in the period	Overstated if lockdown days are included in the period	<i>AQ change will only go part way to correct this</i>
<b>Reconciliation</b>	Unaffected	Unaffected		Corrects allocation and UIG	Corrects allocation and UIG	
<b>Rolling AQ</b>	Increases in monthly steps	Decreases in monthly steps		Increases in small monthly steps	Decreases in small monthly steps	<i>Depends on meter read frequency</i>
<b>Formula Year AQ</b>	N/A	N/A		Increases for 2021 if reads have been accepted	Decreases for 2021 if reads have been accepted	<i>Depends on scale and duration of demand change</i>
<b>Capacity Charge rates</b>	Unit price decreases as AQ rises	Unit price increases as AQ drops – step change at 732,000 kWh		No impact	No impact	<i>CI 3/4 uses Formula Year AQ</i>



## SECTION 1: Detailed Assessment of Impacts of COVID-19 GB Lockdown on Settlement, AQ, Charging Rates

IMPACTS AFTER LOCKDOWN ENDS						
	Class 1/2			Class 3/4		
	Usage Increased <u>During</u> Lockdown (now back down)	Usage Decreased <u>During</u> Lockdown (now increased again)	Notes	Usage Increased <u>During</u> Lockdown (now back down)	Usage Decreased <u>During</u> Lockdown (now increased again)	Notes
<b>Nominations</b>	Unaffected	Unaffected		Overstated (assuming that the AQ had been affected)	Understated (assuming that the AQ had been affected)	Opposite effect on UIG
<b>Allocations</b>	Unaffected	Unaffected		Overstated (assuming that the AQ had been affected)	Understated (assuming that the AQ had been affected)	Opposite effect on UIG
<b>Meter reading submission</b>	No impacts	Read rejections are possible if AQ has dropped significantly	The larger the AQ, the tighter the read tolerances	No impacts	Read rejections are possible if usage increases very sharply	The larger the AQ, the tighter the read tolerances
<b>Read Estimation</b>	Unaffected	Unaffected	Assumes this is a new read issue, not ongoing	Understated if lockdown days are included in the period	Overstated if lockdown days are included in the period	AQ change will only go part way to correct this
<b>Reconciliation</b>	Unaffected	Unaffected		Corrects allocation and UIG	Corrects allocation and UIG	
<b>Rolling AQ</b>	Returns to normal in monthly steps (c. 12m)	Returns to normal in monthly steps (c. 12m)		Returns to normal in monthly steps (9 to 36m)	Returns to normal in monthly steps (9 to 36m)	Depends on meter read activity
<b>Formula Year AQ</b>	N/A	N/A		FYAQ for April 2021 could be overstated	FYAQ for April 2021 could be understated	Snapshot taken on 1 Dec each yr
<b>Capacity Charge rates</b>	Unit price returns to normal as AQ drops	Unit price falls again when (if) AQ rises above 732,000 kWh		No impact	No impact	Uses Formula Year AQ

## SECTION 2: Analysis of Possible Measures to Address Impacts

POSSIBLE MEASURES	Class 1/2 Impacts to be addressed			Class 3/4 Impacts to be addressed				Notes
	Read rejections (due to increased usage during lockdown)	Step change in Capacity Charge Rates when AQ drops	Read rejections (due to usage increasing after lockdown)	Inaccurate Nominations & Allocations (during lockdown)	Inaccurate Nominations & Allocations (after lockdown)	Read rejections (increased usage – during/ after lockdown)	Over/Under-stated NDM Read Estimation	
“Fix” the Class 1 and 2 AQs until back to normal	X	✓	✓	N/A	N/A	N/A	N/A	
Shippers submit AQ Corrections where required	✓	✓ (if AQ remains above 732,000 kWh)	✓ (need to correct again after lockdown)	✓	✓ (need to correct again after lockdown)	✓ (need to correct at least twice – once for lockdown, once after)	✓ (need to correct again after lockdown)	<i>Impact on Formula Year AQ and Network Revenue (and possibly prices)</i>
Set a “Fault Flag” on affected meters (to prevent AQ changes)	X Prevents all reads from being used for allocation – AND could cause UIG volatility due to lack of actuals	✓	✓ (once the fault flag is removed)	X Meter reads are still used in reconciliation and AQ	X Meter reads are still used in reconciliation and AQ	X Meter reads are still used in reconciliation and AQ	X Meter reads are still used in reconciliation and AQ	
Set an AQ “Backstop Date” on selected sites (prevents AQ calc back past date X)	X	✓	✓	X	✓	? Only works for sites which follow the majority trend at the same time	X	<i>Would use Lockdown period in AQ calcs after 9 months, unless new Backstop applied</i>

## SECTION 2: Analysis of Possible Measures to Address Impacts

POSSIBLE MEASURES	Class 1/2 Impacts to be addressed			Class 3/4 Impacts to be addressed				Notes
	Read rejections (due to increased usage during lockdown)	Step change in Capacity Charge Rates when AQ drops	Read rejections (due to usage increasing after lockdown)	Inaccurate Nominations & Allocations (during lockdown)	Inaccurate Nominations & Allocations (after lockdown)	Read rejections (increased usage – during/ after lockdown)	Over/Under-stated NDM Read Estimation	
Submit monthly “zero progression” meter reading (if no actuals available)	N/A	X	X	X But ensures that a monthly “reconciliation to zero” occurs	X First “actual” reading will account for any pre-lockdown energy	X	 In part – reduces period of incorrect estimation	AQ calculation would use these meter readings
Amend the NDM Profiles (e.g. ALPs/ DAFs)	N/A	N/A	N/A	? Only works for sites which follow the majority trend at the same time	? Only works for sites which follow the majority trend at the same time	X	? Only works for sites which follow the majority trend at the same time	Not enough information available to calculate accurate factors for future gas days
<b>LONGER TERM SOLUTIONS</b>								
Introduce a Formula Year AQ for Class 2 sites	N/A		N/A	N/A	N/A	N/A	N/A	Charges would be static for a whole year, even if usage changed

## SECTION 2: Analysis of Possible Measures to Address Impacts

POSSIBLE MEASURES	Class 1/2 Impacts to be addressed			Class 3/4 Impacts to be addressed				Notes
	Read rejections (due to increased usage during lockdown)	Step change in Capacity Charge Rates when AQ drops	Read rejections (due to usage increasing after lockdown)	Inaccurate Nominations & Allocations (during lockdown)	Inaccurate Nominations & Allocations (after lockdown)	Read rejections (increased usage – during/ after lockdown)	Over/Under-stated NDM Read Estimation	
Introduce a standard transportation rate for Class 2 sites	N/A	✓	N/A	N/A	N/A	N/A	N/A	
Allow DM SOQ reductions all year round	N/A	✓	N/A	N/A	N/A	N/A	N/A	
Introduce a “Vacant” flag as in Electricity	N/A	N/A	N/A	✓	✓ Assumes that the AQ is not amended	X	✓	<i>Assumes that the Shipper is aware of the shutdown, and removes the flag promptly after re-opening</i>