Storengy UK – Response to Ofgem consultation (Jan-Feb 2020) on:

UNC678/A/B/C/D/E/F/G/H/I/J: Amendments to Gas Transmission Charging Regime

Please note that each response must be accompanied by a brief summary of no more than 250 words.

Storengy believes that the proposed gas charging changes will be hugely detrimental to gas storage in the UK and the UK gas consumer:

- Substantial increase in costs and loss of revenues for storage facilities, as highlighted in CEPA' analysis that storage will see a 61% reduction in revenues under UNC678A.
- UK storage even less competitive with continental storage and other sources of GB flexibility.
- Further closures and mothballing of UK storage facilities, loss of security of supply, and loss of price security.
- No allowance in the proposed charging for the benefits and flexibility that storage facilities provide to the consumers of gas and electricity.
- No allowance in the charging for storage being an embedded parking facility within the transmission network, and to the nature of flows in supporting the network.
- Proposed charging arrangements for storage are detrimental to the well-functioning of the market, when higher discounts and usage of storage facilities is hugely beneficial to the market and adds significant value.
- Short timescales for implementation of changes present severe risk and disruption for the industry.
- Postage Stamp and Capacity Weighted Distance methodologies are both cost recovery mechanisms and neither are reflective of the costs and usage of the transmission system.
- Limited consideration given to issues raised in proposals deemed uncompliant by Ofgem, eg, substantial increases in prices for some capacity already acquired.

Question 1: What is your view of our assessment that Postage Stamp is a more appropriate RPM in light of the circumstances of the GB network?

In responding to this question, please address, in particular, the following points in your response: (i) in a meshed network with spare capacity and declining usage, a fair approach to cost recovery would be based on the level of access to the system irrespective of individual location; and (ii) CWD may introduce signals for use of the network which discourage flows at more distant entry and exit points, without improving network efficiency.

Storengy believes that Postage Stamp and CWD are cost recovery mechanisms, similar to residual in electricity, although neither are fully reflective of the costs and usage of the system. However, Storengy also appreciate that the current system has significant limitations and that some changes to the charging may be needed. In light of current proposals, Storengy does not have a preference between Postage Stamp or CWD, however costs for storage should be considered, as in the Ofgem electricity Transmission Charging Review decision, as intermediary load was excluded from cost recovery. Therefore Storengy has no clear view of which method may be the more appropriate for the GB network.

Question 2: Do you agree with our assessment that maintaining the FCC methodology in the UNC improves the transparency and consistency of governance compared to maintaining the FCC Methodology outside of the UNC?

Maintaining the FCC within the UNC should improve the transparency and consistency of governance as it better facilitates the involvement of the wider industry in decisions, allowing industry members to better raise issues and concerns, and align to other proposals. It should also aid a better understanding of the FCC calculation, sharing of information, and potential impacts of changes. The only drawback is that it may increase timescales for making changes as more parties may need to be involved.

As with the workgroups for UNC Modifications 0678 and 0621, the UNC process encouraged National Grid to share their calculations, and for industry to understand the information used. This allowed the industry to challenge some of the assumptions, improve the quality of the information used, and add greater reliability and accuracy to the calculations. However, it also helped to highlight the long timescales in the calculation process.

Storengy would also like to raise concerns in the proposed current calculation of the FCC, as it assumes zero exit flows for storage sites, and does not currently take into account contracts agreed since 6 April 2017. With storage site exit flows included, and these contracts at the new higher prices, these are expected to create a significant over-recovery of charges to those currently predicted.

Question 3: What is your view on our assessment that the PS RPM would be preferable to the CWD for future green gas market entrants?

Storengy does not believe that there is a significant difference between the Postage Stamp and Capacity Weighted Distance methodologies for future green gas market entrants. Neither method provide significant encouragements to new entrants, as yearly capacity prices are far more difficult to predict for the longer term, making new financial investment less likely. In addition, neither method provide any allowance for incentivising new green gas market entrants.

Question 4: What are your views on our assessment of the quantitative analysis?

Storengy welcomes the analysis undertaken by CEPA in trying to access the impacts of the changes on the market. The short timeframe for undertaking the analysis has meant that they have been "limited by the extent of the cost data that was available", and hence "have relied on a number of assumptions in 'their' analysis" (CEPA analysis 3.5, p46).

Storengy also welcomes the analysis in clearly showing that increasing the storage discount from 50% to 80% would result in the largest decrease in customer bills, as the increased activity of storage facilities would reduce wholesale gas market prices (CEPA analysis 3.4.1/3.4.2, figures 3.16/3.17, p41).

In addition, the analysis helps to clarify the detrimental impact of proposals on storage revenues, suggesting that revenues would reduce by 61% (CEPA analysis 4.1.2, p53) under UNC678A proposals and 33% under UNC678 proposals. Storengy believes that with the data not including

exit flows for many storage activities (CEPA analysis 3.2.4, p29), and not including revenues associated with short term (daily/intraday) injection and withdrawal behaviour, that these percentages is still understated. However, this clearly highlights the potential problems resulting from the proposed charging changes in storage facilities remaining financially viable, and fully operational. Storengy believes that this will further distort competition with foreign gas storage and flexibility assets, discourage any investment in UK storage facilities, and is likely to result in further closure and mothballing of facilities.

Storengy agrees with CEPA' conclusion that the impacts of the increasing the storage discount to 80% and exempting all storage contracts from the revenue recovery charges, results in an "impact (that) is limited (on non-storage points) given the relatively small amount of revenue recovered from gas storage under any of the options" (CEPA analysis 3.2.1, p25).

Question 5: What are your views on our assessment of the modification options presented to us against the applicable UNC objectives? 118 UNC678/A/B/C/D/E/F/G/H/I/J: Amendments to Gas Transmission Charging Regime - minded to decision and draft impact assessment

We do not feel that the decision is fair in concluding that only UNC 678 and UNC 678A are compliant by EU legislation.

As a result of this decision, the issues raised by other Modifications, and solutions proposed, have not been given due consideration. Therefore many of the potential issues have not been properly addressed and this is likely to result in the proposed methodology creating more imbalance in the industry, providing additional competitive barriers, and resulting in higher costs for the end consumer.

As stated in Article 35 of the TAR NC (and consultation document, 3.8, page 28):

"This Regulation shall not affect the levels of transmission tariffs resulting from contracts or capacity bookings concluded before 6 April 2017 where such contracts or capacity bookings foresee no change in the levels of capacity- and/or commodity-based transmission tariffs except for indexation if any."

All of the UNC678 proposals to date fail to comply with this requirement, as for all proposals if this capacity is traded then it would incur revenue recovery charges. This especially discriminates against storage facilities, where facilities have previously been recommended to buy large amounts of capacity for the longer term to ensure it is available to use, and then transfer the required capacity to customers. Under the new methodology this will result in addition charges being applied to pre-6 April 2017 contracts, and is likely to result in significant extra costs associated with the use of storage facilities in the UK (Note: UNC678C/E/F exempt traded storage capacity from RRC).

In UNC678F, Storengy also tried to address the problems created for entry capacity acquired since 6 April 2017, where capacity has been mis-sold at current entry capacity prices, but under UNC678A will be charged at the substantially higher new charges. Similar to the principles of the "existing contracts" as above, this will result in prices for historical agreements being different (over 200 times higher) than originally agreed, and had this been known at the time of acquisition may have resulted in very different investment decisions. Therefore Storengy proposed a "surrender process" for this capacity, where relevant parties could review this investment decision in light of the knowledge of the new prices, and decide whether to keep the capacity under the new terms or surrender the capacity with no further obligations. Storengy believes that this proposal would be compliant with TAR NC as it does not restrict a process of this kind, and would facilitate a fairer and more competitive approach to the market. Note: A similar process has already been adopted in Germany and has been approved as compliant with EU Tariff Code.

In addition, Storengy is disappointed that both of the proposals considered compliant only incorporate the minimum 50% storage discount on prices. Storengy believes that a far higher discount would be justified to avoid double charging on gas going through storage facilities, and to recognise the benefits that they provide to both the network and the wider industry. However, Storengy welcomes Ofgem' openness in their minded to decision to encourage further proposals for a higher storage discount with justification for its inclusion.

Question 6: What are your views on our conclusion that only two modifications - UNC678 and UNC678A - are compliant with the relevant legislation? If you disagree, please provide a fully reasoned explanation.

As per our response to Question 5, we do not agree with Ofgem' conclusion that only two modifications are compliant with the relevant legislation.

Neither of the two proposals fully comply with the TAR NC statement that transmission tariffs resulting from pre-6 April 2017 contracts or capacity bookings should remain unchanged, as both add additional revenue recovery charges to these contracts/bookings if they are transferred to another party, such as the customers of storage facilities. As stated by Ofgem in 4.24 of the consultation document, "application of new RRCs to contracts falling within the scope of Article 35 TAR would affect the levels of transmission tariffs in respect of those contracts, contrary to the intention of TAR NC".

In addition, as a result of the work carried out by the Workgroup for reviewing UNC678 proposals, Storengy believes that many more of the proposals put forward are just as compliant, if not more compliant with the relevant legislation than these two proposals. As a result Ofgem has severely limited the proposed options available, and not given full consideration to the many issues and solutions raised in the other proposals.

For example, in Storengy' proposal, UNC678F, we raised concerns around the levying of and justification for revenue recovery charges on storage facilities, as well as the treatment of historical contracts and capacity bookings made since 6 April 2017; and provided solutions for both issues. In addition, we provided substantial justification for a higher storage discount of 80%, which although acknowledged in Ofgem' minded to decision, has not been included in this decision as it is only deemed to have been raised by so called non-compliant proposals.

Question 7 a) Given our conclusion that only two modifications are compliant with the relevant legislation, what are your views on our minded-to decision to approve UNC678A rather than UNC678? b) Do you consider our minded-to decision to appropriately reflect the principles based assessment and quantitative analysis presented in this report? c) Do you agee it best facilitates the relevant objectives? Please fully justify your response.

As both methods are essentially a post cost recovery mechanism, Storengy does not believe that either provide a full reflection of the cost reflectivity and usage of the gas transmission network. It

is not clear from the analysis undertaken and the commentary provided that either method better reflect the principles and relevant objectives than the existing methodology. Therefore it is not clear whether the proposed changes would better facilitate the recovery of system costs, or provide a fairer approach across the industry. In addition, Storengy does not see a significant difference between the Postage Stamp and Capacity Weighted Distance methodologies, and therefore has no clear view of which method may be the more appropriate for the GB network.

Given Ofgem' conclusion that these are the only two modifications that are compliant with the relevant legislation, Storengy believes that little consideration has been given to the future of gas storage in the UK, and the benefits that it provides in:

- minimising supply and demand mismatches and need for network balancing
- minimising volatility of prices, and providing parking for gas within the network
- minimising network pressures (minimising need for network investment)
- providing supply reliability
- increased flexibility for the network and the industry in delivering gas and minimising costs

All of these storage benefits add value to the industry and help to minimise costs to the end consumer.

Question 8: What are your views on our assessment that the proposed RPM (PS under UNC678A) achieves, inter alia, the following objectives: a) enables network users to reproduce the calculation of reference prices and their accurate forecast; b) presents a better option than CWD for the recovery of the costs of the gas transmission system in the presence of a meshed network characterised by spare capacity and declining usage, and where cost-reflectivity is less relevant; c) ensures non-discrimination and prevents undue cross-subsidisation (you may refer to the results of NGGT's Cost Allocation Assessment ("CAA") published as a subsidiary document to this consultation); d) ensures that significant volume risk related particularly to transports across an entry-exit system is not assigned to final customers within that entry-exit system; e) ensures that the resulting reference prices do not distort cross-border trade?

a) Although Postage Stamp (PS) is simpler than Capacity Weighted Distance (CWD) to calculate, information required for the calculation is not easily available or easy to interpret. In addition, the information required for the calculation needs to be far more detailed and slight differences in data can make a significant impact on the prices calculated. Therefore reproducing the calculation of the reference prices for future years is almost impossible, and visibility of prices for the longer term is likely to be very poor. The impact of this can be clearly seen in the recent auctioning of storage capacity by Storengy, where bid prices for contracts 12-18 months ahead are significantly lower than for contracts starting imminently, with bidders making a large allowance in their bid levels for the uncertainty of transmission charges in the longer term.

b) Storengy does not believe that there is a significant difference between PS and CWD in a meshed network with space capacity and declining usage. Both PS and CWD are post cost recovery mechanisms, and therefore neither are fully reflective of the costs and usage of the system.

c) The PS mechanism removes location incentives from the system and so does not properly reflect gas flows within the network and therefore system usage. Proposals for this mechanism discriminate against storage facilities as a parking facility within the system, in so far that gas is

already making a contribution to cost recovery upon entry and exit of the NTS, with further charges levied on storage facilities effectively double charging for the gas. In addition, proposals for this mechanism fail to take into account that storage facilities are embedded within the NTS, and therefore form a key part of the network, alleviating pressures on the system and allowing gas to be delivered quickly when and where required.

d) Neither CWD nor PS avoid the consequences of changes in transport costs across the network being passed on to the final customers. Both discriminate against gas storage in the local network, making the UK market more reliant on just in time LNG deliveries and continental storage which are not within the control of the UK network. This significantly increases the risk of reliability of supply, as well as increasing average transport costs and making them less predictable. These changes also make GB, with storage capacity more expensive to access, a less attractive place to land LNG, resulting in large volume risks for end consumers (less volume contributing to network costs recovery = higher unit price).

e) The resulting reference prices are entirely focused on the internal UK network, and therefore take no account of any distortion of charges for other countries and cross-border trade. As a result, they will further tilt the balance of charges between the UK storage and storage in other countries, distorting cross-border trade, where high business rates already leave UK facilities handicapped.

Question 9: What are your views on our minded-to decision that implementation should take place from 1 October 2020 to coincide with the start of that gas year?

We believe that implementation by 1st October 2020, will result in any changes being rushed through, with little if any testing of calculations and procedures, and no time for industry to adjust contracts and operations to minimise any detrimental impacts on costs and efficiency.

Storengy believe that it is critical to allow industry time between the notification of final proposals, and the implementation date, for the industry to plan, prepare, and agree relevant contracts, to minimise any potentially detrimental effects of charging changes. We believe that a timescale of 12-18 months between decision and implementation dates should allow sufficient time for industry members to make the changes required to make a smooth transition to a new charging regime, and minimise any costs to the industry and the end consumer. Therefore Storengy believes that if a prompt decision is made, an implementation date of 1st October 2021 should allow sufficient time for the industry to adjust to the changes.

In addition, Storengy has significant concerns over the short timescales for Xoserve and National Grid to make the required changes to their systems to fully implement any proposals. If changes are rushed through for 1st October 2020 then this will give little time for system development, facilitating changes in industry behaviour, and in testing the reliability and accuracy of the systems and processes. A 1st October 2021 start date, would allow invaluable time for these changes to be made, and result in a far smoother and more efficient implementation of a new charging regime.

Question 10: Are there any other matters, whether or not addressed in our analysis or minded-to findings, which you think we should take into account in reaching our final determination?

Threat to existence of gas storage in the UK

The current gas charging proposals represent a major threat to the ongoing operation of storage facilities in the UK, with a substantial increase in the cost of moving gas on and off the transmission network. This combined with high business rates, leave UK storage severely handicapped in competing against continental storage facilities and other sources of flexibility, as well as making it far more difficult to break-even financially and continue in operation. Storengy believes that in the longer term this is likely to result in further loss of storage capacity in the UK, reducing market flexibility in the local UK network and increasing reliance on flexibility from other countries, increasing price volatility, and reducing security of supply.

Benefits provided by storage facilities

In addition, the proposed charging structure fails to recognise the benefits provided by storage facilities to the network, the market, and in minimising costs to the end consumer:

- minimising supply and demand mismatches and need for network balancing
- minimising volatility of prices, and providing parking for gas within the network
- minimising network pressures (minimising need for network investment)
- providing supply reliability
- increased flexibility for the network and the industry in delivering gas and minimising costs

Analysis/Papers

Further information on the UK storage industry, impacts of the charging changes, benefits provided by storage to the industry, and justification for a higher storage discount can be found on the papers published by Storengy and Waters Wye Associates last year via the following links:

 Storengy paper:
 https://www.gasgovernance.co.uk/index.php/0678/Analysis
 (GCR Gas Storage

 Benefits Analysis Document v1.3)

 Waters Wye paper:
 https://www.gasgovernance.co.uk/index.php/0678
 (NTS Charging Review: setting a tariff discount for storage (GSOG WWA))

Change in behaviour

With charges increasing under the new proposals and minimal incentive to book capacity early, businesses will look to minimise charges by booking capacity nearer to the time when the capacity is to be used, and so volumes required are easier to ascertain. This is likely to see the market moving closer to just in time capacity bookings. This will see much more emphasis on short term import decisions, less long term predictability, and is likely to see a higher volatility of supply and demand in the market, with cost passed on to end consumers of gas and electricity.

Storengy also has concerns that these changes in behaviour will add further pressures to National Grid systems and processes in managing the sale of capacity. Systems will need significant development to meet the demand from these changes in behaviour, and with the short timescales for development and testing this could result in significant problems in implementing charging changes quickly.

Under-estimate of price increases for storage sites in Consultation Data Tables

Storengy would also like to raise awareness that prices reflected as current prices for storage facilities in the data tables are currently incorrect, as they include TO commodity charges which storage facilities are currently exempt from paying. Therefore the percentage increases in price for the new proposals are significantly under-stated. The corrected percentage increases can be seen below:

Entry Charges

Percentage of CWD adjusted price in associated year compared with LRMC (Capacity (QSEC) and Commodity) in 18/19											
		MOD678				MOD678A					
Entry Point 🛛 🗸	Entry Point Typ 🖵	19/20 💌	20/21 💌	21/22 💌	22/23 💌	19/20 💌	20/21 💌	21/22 🔽	22/23 💌		
Avonmouth	STORAGE SITE	16582%	17937%	17618%	17279%	20056%	21447%	20625%	20006%		
Barton Stacey	STORAGE SITE	16156%	17536%	17221%	16884%	20056%	21447%	20625%	20006%		
Cheshire	STORAGE SITE	13279%	14430%	14177%	13886%	20056%	21447%	20625%	20006%		
Caythorpe	STORAGE SITE	108%	116%	113%	109%	173%	185%	178%	172%		
Dynevor Arms	STORAGE SITE	201%	217%	213%	209%	231%	247%	237%	230%		
Fleetwood	STORAGE SITE	14388%	15525%	15219%	14811%	20056%	21447%	20625%	20006%		
Glenmavis	STORAGE SITE	163%	176%	173%	169%	151%	161%	155%	150%		
Garton	STORAGE SITE	95%	102%	99%	96%	160%	172%	165%	160%		
Hole House Farm	STORAGE SITE	13107%	14254%	14007%	13729%	20056%	21447%	20625%	20006%		
Hornsea	STORAGE SITE	89%	95%	93%	90%	145%	155%	149%	145%		
Hatfield Moor (storage)	STORAGE SITE	359%	383%	374%	361%	627%	670%	645%	625%		
Partington	STORAGE SITE	13642%	14803%	14536%	14218%	20056%	21447%	20625%	20006%		

Exit Charges

Percentage of CWD adjusted price in associated year compared with LRMC (Capacity and Commodity) in 18/19											
		MOD678			MOD678A						
Exit Point	Exit Point Type 🖵	19/20 💌	20/21 🔻	21/22 💌	22/23 🔻	19/20 💌	20/21 💌	21/22 💌	22/23 💌		
Avonmouth Max Refill	STORAGE SITE	57%	65%	68%	70%	50%	56%	57%	58%		
Bacton (Baird)	STORAGE SITE	6665%	7345%	7493%	7583%	7768%	8601%	8784%	8900%		
Barrow (Bains)	STORAGE SITE	123%	135%	137%	139%	118%	130%	133%	135%		
Barrow (Gateway)	STORAGE SITE	123%	135%	137%	139%	118%	130%	133%	135%		
Barton Stacey Max Refill (Humbly Grove)	STORAGE SITE	38%	43%	45%	46%	33%	37%	37%	38%		
Caythorpe	STORAGE SITE	6132%	6668%	6773%	6843%	7768%	8601%	8784%	8900%		
Deborah Storage (Bacton)	STORAGE SITE	6665%	7345%	7493%	7583%	7768%	8601%	8784%	8900%		
Dynevor Max Refill	STORAGE SITE	8541%	9942%	10313%	10676%	7768%	8601%	8784%	8900%		
Garton Max Refill (Aldbrough)	STORAGE SITE	5895%	6414%	6514%	6576%	7768%	8601%	8784%	8900%		
Glenmavis Max Refill	STORAGE SITE	10105%	11081%	11262%	11396%	7768%	8601%	8784%	8900%		
Hatfield Moor Max Refill	STORAGE SITE	601%	657%	669%	678%	777%	860%	878%	890%		
Hill Top Farm (Hole House Farm)	STORAGE SITE	31%	34%	35%	36%	34%	38%	39%	39%		
Hole House Max Refill	STORAGE SITE	31%	34%	35%	36%	34%	38%	39%	39%		
Holford	STORAGE SITE	32%	35%	36%	37%	35%	39%	40%	40%		
Hornsea Max Refill	STORAGE SITE	6040%	6568%	6671%	6738%	7768%	8601%	8784%	8900%		
Partington Max Refill	STORAGE SITE	34%	37%	38%	39%	36%	40%	41%	42%		
Saltfleetby Storage (Theddlethorpe)	STORAGE SITE	6206%	6815%	6947%	7036%	7768%	8601%	8784%	8900%		
Stublach (Cheshire)	STORAGE SITE	32%	35%	36%	37%	35%	39%	40%	40%		
Rough Max Refill	STORAGE SITE	5997%	6525%	6627%	6688%	7768%	8601%	8784%	8900%		

Note: These tables reflect the prices for firm capacity. Where as in reality most storage exit capacity is normally booked as interruptible capacity, which is normally zero priced. Under the new proposals interruptible prices will be 90% of the firm capacity prices.