# Supplemental slides to accompany NGGD December MOD0186

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#### Approach for Dec-15 MOD0186

- Updated to Nov-15 HMT Forecasts for UK Economy which crystallises RPIf for 16/17
- Standard RPI indices updates for Sep-15 and Oct-15
- Finalisation of MODt per 2015 AIP main difference is cost of debt
- Collectable revenue updated in respect of finalised demand positions included in Oct-15 Indicatives
- Updated NTS Exit Capacity unit rates per publication in Oct-15
- Refreshed NIA expenditure forecast
- For the first time, we have included a projection of net Theft of Gas Recovery, which has the positive impact of returning recovered revenues back to customers
- Updated Shrinkage and Leakage forecast volumes





#### Headline changes to collectable revenue

2015-16 622.3	2016-17	2017-18	2018-19	2019-20	2020-21
622.3					
022.0	599.9	624.3	656.8	665.5	671.6
448.2	434.4	423.5	456.2	457.4	461.4
460.8	455.3	437.0	469.8	482.3	487.2
325.0	322.7	329.7	351.9	360.0	362.8
1,856.3	1,812.2	1,814.6	1,934.7	1,965.2	1,982.9
624.2	597.1	621.2	652.9	661.9	670.6
					460.1
461.8	453.5	435.2	466.4	478.7	486.3
325.8	321.6	327.6	350.3	358.4	361.8
1,859.4	1,805.4	1,807.0	1,922.8	1,953.6	1,978.8
2.0	(2.8)	(3.2)	(4.0)	(3.7)	(1.0)
(0.6)		(0.5)		(2.7)	(1.2)
1.0	(1.8)	(1.8)	(3.5)	(3.6)	(0.9)
0.8	(1.1)	(2.1)	(1.6)	(1.6)	(1.0)
3.1	(6.8)	(7.6)	(11.9)	(11.6)	(4.1)
0.3%	(0.5%)	(0.5%)	(0.6%)	(0.5%)	(0.1%)
(0.1%)	(0.3%)	(0.1%)	(0.6%)	(0.6%)	(0.3%)
0.2%	(0.4%)	(0.4%)	(0.7%)	(0.7%)	(0.2%)
0.2%	(0.3%)	(0.6%)	(0.4%)	(0.5%)	(0.3%)
0.2%	(0.4%)	(0.4%)	(0.6%)	(0.6%)	(0.2%)
	325.0 1,856.3 624.2 447.6 461.8 325.8 1,859.4 2.0 (0.6) 1.0 0.8 3.1 0.3% (0.1%) 0.2% 0.2%	325.0 322.7   1,856.3 1,812.2   624.2 597.1   447.6 433.3   461.8 453.5   325.8 321.6   1,859.4 1,805.4   2.0 (2.8)   (0.6) (1.1)   1.0 (1.8)   0.8 (1.1)   3.1 (6.8)   0.3% (0.5%)   (0.1%) (0.3%)   0.2% (0.4%)	325.0 $322.7$ $329.7$ $1,856.3$ $1,812.2$ $1,814.6$ $624.2$ $597.1$ $621.2$ $447.6$ $433.3$ $423.0$ $461.8$ $453.5$ $435.2$ $325.8$ $321.6$ $327.6$ $1,859.4$ $1,805.4$ $1,807.0$ $2.0$ $(2.8)$ $(3.2)$ $(0.6)$ $(1.1)$ $(0.5)$ $1.0$ $(1.8)$ $(1.8)$ $0.8$ $(1.1)$ $(2.1)$ $3.1$ $(6.8)$ $(7.6)$ $0.3%$ $(0.5%)$ $(0.5%)$ $(0.1%)$ $(0.3%)$ $(0.1%)$ $0.2%$ $(0.4%)$ $(0.4%)$ $0.2%$ $(0.3%)$ $(0.6%)$	325.0 $322.7$ $329.7$ $351.9$ $1,856.3$ $1,812.2$ $1,814.6$ $1,934.7$ $624.2$ $597.1$ $621.2$ $652.9$ $447.6$ $433.3$ $423.0$ $453.3$ $461.8$ $453.5$ $435.2$ $466.4$ $325.8$ $321.6$ $327.6$ $350.3$ $1,859.4$ $1,805.4$ $1,807.0$ $1,922.8$ $2.0$ $(2.8)$ $(3.2)$ $(4.0)$ $(0.6)$ $(1.1)$ $(0.5)$ $(2.9)$ $1.0$ $(1.8)$ $(1.8)$ $(3.5)$ $0.8$ $(1.1)$ $(2.1)$ $(1.6)$ $3.1$ $(6.8)$ $(7.6)$ $(11.9)$ $0.3%$ $(0.5%)$ $(0.5%)$ $(0.6%)$ $(0.1%)$ $(0.3%)$ $(0.1%)$ $(0.6%)$ $0.2%$ $(0.3%)$ $(0.6%)$ $(0.4%)$ $0.2%$ $(0.3%)$ $(0.6%)$ $(0.4%)$	325.0 $322.7$ $329.7$ $351.9$ $360.0$ $1,856.3$ $1,812.2$ $1,814.6$ $1,934.7$ $1,965.2$ $624.2$ $597.1$ $621.2$ $652.9$ $661.9$ $447.6$ $433.3$ $423.0$ $453.3$ $454.7$ $461.8$ $453.5$ $435.2$ $466.4$ $478.7$ $325.8$ $321.6$ $327.6$ $350.3$ $358.4$ $1,859.4$ $1,805.4$ $1,807.0$ $1,922.8$ $1,953.6$ $2.0$ $(2.8)$ $(3.2)$ $(4.0)$ $(3.7)$ $(0.6)$ $(1.1)$ $(0.5)$ $(2.9)$ $(2.7)$ $1.0$ $(1.8)$ $(1.8)$ $(3.5)$ $(3.6)$ $0.8$ $(1.1)$ $(2.1)$ $(1.6)$ $(1.6)$ $3.1$ $(6.8)$ $(7.6)$ $(11.9)$ $(11.6)$ $0.3%$ $(0.5%)$ $(0.5%)$ $(0.6%)$ $(0.5%)$ $0.1%$ $(0.3%)$ $(0.1%)$ $(0.6%)$ $(0.5%)$ $0.2%$ $(0.4%)$ $(0.4%)$ $(0.4%)$ $(0.5%)$





#### **High level change drivers**

			NGGD	TOTAL		
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
COLLECTABLE REVENUE (OCT-15)	1,856.3	1,812.2	1,814.6	1,934.7	1,965.2	1,982.9
INFLATION UPDATES	0.0%	0.0% (2.2)	0.1% <b>(6.6)</b>	0.0% <b>(5.4)</b>	0.0% <b>(5.2)</b>	0.0% <b>(5.3)</b>
FINALISED MODT PER 2015 AIP	-	(5.3)	0.0	(0.0)	0.0	(0.0)
UPDATED NTS EXIT CAPACITY RATES (OCT-15)	-	0.0	0.1	(7.3)	(7.3)	0.3
NIA EXPENDITURE FORECAST	1.3	0.6	0.6	0.0	-	-
YTD NET THEFT OF GAS RECOVERY	(0.6)	-	-	-	-	-
UPDATED SHRINKAGE VOLUMES FOR 15/16 & 16/17	-	-	0.8	0.8	0.9	0.9
UNDER / OVER RECOVERY - DEMAND UPDATES PER INDICATIVES	5.1	0.2	(5.3)	(0.2)	-	-
UNDER / OVER RECOVERY - COLLECTED INCOME	(2.7)	(0.0)	2.8	0.0	-	-
COLLECTABLE REVENUE (DEC-15)	1,859	1,805	1,807	1,923	1,954	1,979
CHANGE (£M)	′ 3	(7)	(8)	(12)	(12)	(4)
CHANGE (%)	0.2%	(0.4%)	(0.4%)	(0.6%)	(0.6%)	(0.2%)

- Much of the movement vs Oct MOD0186 comes from inflation, changes to NTS exit capacity rates for gas year 2016/17, and finalised demand positions for 15/16 impacting the projected under/over-recovery
- Network level drill down of each component shown in following slides



#### Inflation

NETWORK	NOTES	2014	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
EAST OF ENGLAND		▼	-	(0.7)	(2.2)	(1.8)	(1.8)	(1.8)
LONDON	BASED ON NOV-15 HMT FORECASTS FOR UK ECONOMY & AVAILABLE RPI INDICES	▼	-	(0.5)	(1.6)	(1.3)	(1.2)	(1.2)
NORTH WEST	TO NOV-15	▼	-	(0.5)	(1.6)	(1.3)	(1.3)	(1.3)
WEST MIDLANDS	10 100-15	▼	-	(0.4)	(1.2)	(1.0)	(1.0)	(1.0)
INFLATION (£M CHA	NGE)	$\mathbf{\nabla}$	-	(2.2)	(6.6)	(5.4)	(5.2)	(5.3)
EAST OF ENGLAND		▼	-	(0.1%)	(0.4%)	(0.3%)	(0.3%)	(0.3%)
LONDON		▼	-	(0.1%)	(0.4%)	(0.3%)	(0.3%)	(0.3%)
NORTH WEST		▼	-	(0.1%)	(0.4%)	(0.3%)	(0.3%)	(0.3%)
WEST MIDLANDS		▼	-	(0.1%)	(0.4%)	(0.3%)	(0.3%)	(0.3%)
INFLATION (% CHAN	GE)		-	(0.1%)	(0.4%)	(0.3%)	(0.3%)	(0.3%)

- Inflation movements include updates to both the RPIF and RPIA term.
- Nov-15 HMT Medium Term Forecasts for UK Economy which crystallises RPIf for 16/17 (and therefore Final Charges)
- Standard indices updates for Sep-15 and Oct-15 impacting RPIA



#### **Finalised MOD per AIP**

NETWORK	NOTES		2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
AST OF ENGLAND		▼	-	(2.5)	0.0	(0.0)	(0.0)	(0.0)
ONDON	PRIMARILY COST OF DEBT DRIVEN WITH MINOR REC DIFFS TO TOTEX AND	▼	-	(0.9)	0.0	(0.0)	0.0	0.0
NORTH WEST	UNCERTAINTY MEASURES	▼	-	(1.2)	0.0	(0.0)	0.0	(0.0)
VEST MIDLANDS	UNCERTAINTY MEASURES	▼	-	(0.7)	0.0	(0.0)	0.0	(0.0)
INALISED MODt PE	R 2015 AIP (£M CHANGE)		-	(5.3)	0.0	(0.0)	0.0	(0.0)
AST OF ENGLAND		▼	-	(0.4%)	0.0%	(0.0%)	(0.0%)	(0.0%)
ONDON		▼	-	(0.2%)	0.0%	(0.0%)	0.0%	0.0%
NORTH WEST		▼	-	(0.3%)	0.0%	(0.0%)	0.0%	(0.0%)
VEST MIDLANDS		▼	-	(0.2%)	0.0%	(0.0%)	0.0%	(0.0%)
INALISED MODT PE	R 2015 AIP (% CHANGE)		-	(0.3%)	0.0%	(0.0%)	0.0%	(0.0%)

- Finalisation of MODt per 2015 AIP main difference is cost of debt
- Cost of Debt has not been updated for future years, but we anticipate movement and the potential impact this may have has been included separately as a sensitivity



#### **NTS Exit Capacity**

NETWORK	NOTES		2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
EAST OF ENGLAND LONDON NORTH WEST	BASED ON RATES ISSUED BY NTS IN OCT- 15. IMPACT TO COST PASS THROUGH	▼ ▼ ▼	-	0.0 0.0 (0.0)	0.1 0.0 0.0	(2.6) (1.5) (2.7)	(2.6) (1.5) (2.6)	0.1 0.1 0.1
WEST MIDLANDS	ELEMENT (INCENTIVE BASED ON t-3 INDICATIVES) CAPACITY RATES (£M CHANGE)	▼ ▼	-	0.0	0.0	(0.6)	(0.6)	0.1 0.3
	CAPACITY KATES (EWI CHANGE)		-					
EAST OF ENGLAND		<b>•</b>	-	0.0%	0.0%	(0.4%)	(0.4%)	0.0%
LONDON		<b>–</b>	-	0.0%	0.0%	(0.3%)	(0.3%)	0.0%
NORTH WEST		<b>–</b>	-	(0.0%)	0.0%	(0.6%)	(0.5%)	0.0%
WEST MIDLANDS			-	0.0%	0.0%	(0.2%)	(0.2%)	0.0%
UPDATED NTS EXIT	CAPACITY RATES (% CHANGE)		-	0.0%	0.0%	(0.4%)	(0.4%)	0.0%

- Updated NTS Exit Capacity unit rates per publication in Oct-15 impact to cost pass through element only as incentive based on May t-3 indicative prices
- Latest revised unit rates from NTS only apply to gas year 2016/17 impacting the second half of 2016/17 and the first half of our 2017/18 Exit Capacity costs, hence the 2018/19 and 2019/20 cost pass through lines because of 2 year lagging



#### NIA

NETWORK	NOTES		2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
EAST OF ENGLAND			0.4	0.2	0.2	0.0	-	-
LONDON			0.3	0.1	0.1	0.0	-	-
NORTH WEST			0.3	0.1	0.1	0.0	-	-
WEST MIDLANDS			0.2	0.1	0.1	0.0	-	-
NIA EXPENDITUR	E FORECAST (£M CHANGE)		1.3	0.6	0.6	0.0		
EAST OF ENGLAND		•	0.10/	0.00/	0.00/	0.00/		
LONDON			0.1% 0.1%	0.0% 0.0%	0.0% 0.0%	0.0% 0.0%	-	-
NORTH WEST			0.1%	0.0%	0.0%	0.0%	-	-
WEST MIDLANDS			0.1%	0.0%	0.0%	0.0%	-	-
	E FORECAST (% CHANGE)		0.1%	0.0%	0.0%	0.0%	-	-

Refreshed NIA expenditure forecast – this is an in-year allowed revenue mechanism, • so no lagged impact



## Theft of gas – Miscellaneous pass-through

NETWORK	NOTES		2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
EAST OF ENGLAND			0.0	-	-	-	-	-
LONDON	BASED ON YTD RECOVERIES NET OF	▼	(0.1)	-	-	-	-	-
NORTH WEST	INVESTIGATION COSTS		0.0	-	-	-	-	-
WEST MIDLANDS		▼	(0.5)	-	-	-	-	-
THEFT OF GAS (£M	CHANGE)	$\mathbf{\nabla}$	(0.6)	-	-	-	-	-
EAST OF ENGLAND			0.0%	-	-	-	-	-
LONDON		$\bullet$	(0.0%)	-	-	-	-	-
NORTH WEST			0.0%	-	-	-	-	-
WEST MIDLANDS		▼	(0.1%)	-	-	-	-	-
THEFT OF GAS (% C	HANGE)		(0.0%)	-	-	-	-	-

- For the first time, we have been able to provide a forecast view of net Theft of Gas recovery.
- Performance in theft recovery continuing to improve resulting in net pass back to consumers and subsequent reduction in allowed revenue, predominantly in West Midlands network.
- Similar to NIA, this is an in-year allowed revenue mechanism, so no lagged impact





## Shrinkage & Leakage volumes

NETWORK	NOTES		2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
EAST OF ENGLAND			-	-	0.4	0.7	0.7	0.7
LONDON	IMPACT TO SHRINKAGE COSTS,	▼	-	0.0	0.1	(0.0)	(0.1)	(0.1)
NORTH WEST	SHRINKAGE INCENTIVE & EEI INCENTIVE OF UPDATED 15/16 & 16/17 VOLUME		-	(0.0)	0.3	0.3	0.3	0.3
WEST MIDLANDS	FORECASTS	▼	-	-	(0.0)	(0.1)	(0.1)	(0.1)
SHRINKAGE & LEAK	AGE VOLUMES (£M CHANGE)		-	-	0.8	0.8	0.9	0.9
EAST OF ENGLAND			-	-	0.1%	0.1%	0.1%	0.1%
LONDON		▼	-	0.0%	0.0%	(0.0%)	(0.0%)	(0.0%)
NORTH WEST			-	(0.0%)	0.1%	0.1%	0.1%	0.1%
WEST MIDLANDS		▼	-	-	(0.0%)	(0.0%)	(0.0%)	(0.0%)
SHRINKAGE & LEAK	AGE VOLUMES (% CHANGE)				0.0%	0.0%	0.0%	0.0%

• Updated forecast to Shrinkage and leakage volumes



#### **Under / Over Recovery**

NETWORK	NOTES		2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
EAST OF ENGLAND LONDON NORTH WEST WEST MIDLANDS	ADDITIONAL IMPACT TO 15/16 COLLECTED REVENUE FORECAST FOR FINALISED DEMAND POSITIONS	▼ ▲ ▼	2.6 (0.5) 1.8 1.1	0.1 (0.0) (0.0) 0.1	(2.7) 0.5 (1.9) (1.1)	(0.1) 0.0 0.0 (0.1)	- - -	- - -
DEMAND PER OCT-2	15 INDICATIVES (£M CHANGE)	$\mathbf{\nabla}$	5.1	0.2	(5.3)	(0.2)	-	-
EAST OF ENGLAND LONDON NORTH WEST WEST MIDLANDS	COLLECTED REVENUE TRACKING BEHIND FORECAST		(1.1) (0.3) (1.2) (0.1)	0.1 0.1 (0.2) (0.1)	1.1 0.3 1.2 0.1	(0.1) (0.1) 0.2 0.1	- - -	
COLLECTED REVENU	E UPDATES (£M CHANGE)		(2.7)	(0.0)	2.8	0.0	-	-
EAST OF ENGLAND LONDON NORTH WEST WEST MIDLANDS	COMBINED IMPACT TO 15/16 & 16/17 COLLECTED REVENUE, AND CORRESPONDING 2 YEAR LAGGED ALLOWED REVENUE ADJ	▼ ▲ ▼	1.5 (0.8) 0.6 1.0	0.2 0.1 (0.2) (0.1)	(1.6) 0.8 (0.7) (1.1)	(0.2) (0.1) 0.2 0.1	- - -	-
NET OVER / UNDER	RECOVERY (£M CHANGE)	$\mathbf{\nabla}$	2.4	0.1	(2.5)	(0.1)	-	-
EAST OF ENGLAND LONDON NORTH WEST WEST MIDLANDS		▼ ▼ ▼	0.2% (0.2%) 0.1% 0.3%	0.0% 0.0% (0.0%) (0.0%)	(0.3%) 0.2% (0.1%) (0.3%)	(0.0%) (0.0%) 0.0% 0.0%	- - -	-
NET OVER / UNDER	RECOVERY (% CHANGE)	$\mathbf{\nabla}$	0.1%	0.0%	(0.1%)	(0.0%)	-	-

• Net over-recovery projected for 2015/16, mainly driven by finalisation of demand conditions from October 2015.



#### **Cost of Debt sensitivity**

NETWORK	NOTES		2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
EAST OF ENGLAND		▼	-	-	(2.2)	(2.3)	(2.4)	(2.5)
LONDON	CURRENTLY REVIEWING LONG TERM	▼	-	-	(1.5)	(1.7)	(1.7)	(1.8)
NORTH WEST	COST OF DEBT % RATES. SENSITIVITY	▼	-	-	(1.5)	(1.6)	(1.7)	(1.7)
WEST MIDLANDS	SHOWN IN TABLE 8 IN THE INTERIM	▼	-	-	(1.1)	(1.2)	(1.3)	(1.3)
COST OF DEBT SENS	SITIVITY (£M CHANGE)	$\mathbf{\nabla}$	-	-	(6.3)	(6.9)	(7.1)	(7.3)
EAST OF ENGLAND		▼	-	-	(0.4%)	(0.4%)	(0.4%)	(0.4%)
LONDON		▼	-	-	(0.4%)	(0.4%)	(0.4%)	(0.4%)
NORTH WEST		▼	-	-	(0.3%)	(0.3%)	(0.3%)	(0.4%)
WEST MIDLANDS		▼	-	-	(0.3%)	(0.4%)	(0.4%)	(0.4%)
COST OF DEBT SENS	SITIVTY (% CHANGE)				(0.3%)	(0.4%)	(0.4%)	(0.4%)

 As previously mentioned, Cost of Debt has not been updated for future years, but we anticipate movement and the potential impact this may have has been included separately as a sensitivity in the Mod0186 report.