



! "#\$%&'((()\$*+, -(+- . / "00-\$
! "#\$%&'(*\$#,("#\$#,) - . "%\$)&/0) - . "%\$)10. \$&%#/)

! "#\$%& ' "(t)*+) , -./0

!
!
!
!

"# \$%& ' " ()*+!" +%" ' " %\$,)'!- &" .)/)' " ()*+0!

!
!

: ; ; <: ; 1 : ! **10)2,0"(\$3+&&0405\$3+&&678')\$9 - ':0"(';<\$**
+> ?!@8ABC!+> ?!@8AB!
%8468A!8D!\$23456789!79! , 3E74!592! , 3E74!\$23456789!

!

%7EE>A656789!03F>AG7E8AH! . 8A7! ' 3E682>A8!
%7EE>A656789!67I>H!

!

: ; ; ; =: ; ; <! **10)2,0"(\$3+&&0405\$3+&&678')\$9 - ':0"(';<\$**
+> ?!@8ABC!+> ?!@8AB!
, 5E6>A!8D!\$23456789!79! , 3E74!592! , 3E74!\$23456789!!
!
, 5E6>AJE! (K>E7E! " 2G7E8AH! . 8A7! ' 3E682>A8!
, 5E6>AJE! (K>E7E! (76I>H!

!

!

1LL:=1LLM! =80"!'- \$3+&&040\$
*N>AI79C! *K78!
, 5E6>A!8D! , 3E74!79!O7E68A745I!P>AD8AQ594>!592! , 3E748I8RS!
T5A8U3>!/I36>!!
, 5E6>A! (>54K>AH! , 74K5>I! . S99!

\$

1LVV=1LL!: **1 , 0\$>0)8+?<\$@- (;';6;0\$+A\$B 6('2\$+A\$1 , 0\$*+, - (\$C+DE'- (\$9 - ':0"(';<\$**
T5I67Q8A>C! , 5ASI592!
T54K>I8A!8D! , 3E74!79!/I36>!P>AD8AQ594>! ?76K!5!Q798A!79!W845I!
P>AD8AQ594>
, 5E6>A! (>54K>AH!X8N>A6! Y7II83RKNS!

\$

1LVM=1LVV! **1 , 0\$*6'&&')"?F2 , ++&&5\$>"0D"));+"<\$3+&&040\$**
+> ?!@8ABC!+> ?!@8AB!
P>AD8AQ594>! ' >A67D7456>!79!/I36>!!
, 5E6>A! (>54K>AH!TA52I>S!Z5A9>A!

!
!

:# " 452>Q74!\$ [F>A7>94>!

!
9 -':0"(';<\$10)2,'-4\$

!
: ; : 1=F>E>96! G((+2');0\$>" +A0((+"\$+A\$B 6('2\$
&97G>AE76S!8D! , 5EE54K3E>6E! . 8 ?>II!
' 8II>R>!8D! /79>! " A6EC!O3Q5976>E!592!08475I!047>94>!
%>F5A6Q>96!8D! , 3E74!

::;11=:;1\! **B 6('2\$10)2,0!"**
 (K>!X5EK7!04K88I!
 %>2K5Q!, " !!
 ' A>56>2!592!7QFI>Q>96>2!5!48QF8E76789=D843E>20!R>9>A5I!
 Q3E74!>23456789!43AA743I3Q!D8A!RA52>E!B!a!V#!
 % 7A>468A!8D!6K>! ' K8A5I!PA8RA5Q!D8A!RA52>E!<!a!M#!
 P8F3I56789!794I32>2!4K7I2A>9! ?76K!EF>475I!9>>2E#!
 !

::; ;L=::;11! **B 6('2\$10)2,0!"**
 (K>! " 92>AE89!04K88I!P0!<<M!
 +> ? !@8ABC!+ @!
 ' A>56>2!592!7QFI>Q>96>2!5!R>9>A5I!Q3E74!>23456789!43AA743I3Q!D8A!
 RA52>E!B!a!<#!
 % 7A>468A!8D!6K>! ' K8A5I!PA8RA5Q!D8A!RA52>E!B!a!<#!
 ' 7S=72>967D7>2!R7D6>2!592!65I>96>2!F8F3I56789#!
 \$

::; ;]=::; ;^! **B 6('2\$10)2,0"\$\$**
 ' 8I3QN75!&97G>AE76S!O>52!065A6!PA8RA5Q!
 +> ? !@8ABC!+ @!
 (53RK6!FA>=E4K88I!Q3E74!4I5EE>E#!
 !

T# PX * / \$00)* + " .!" ' ()W()\$0!
 !

1# PA8D>EE7895I! " EE84756789!P5A6747F56789!
 !

b8K9E89=ZA>>90!\$#!c03NQ766>2d#!P8E6>A#! e >>F!E79R79R!83H!/5Q7I7>EJ!3E>!8D!F8F3I5A!Q3E74!5E!5!A>E83A4>
 D8A!A57E79R!A>E7I7>96!4K7I2A>9#!\$5AIS! ' K7I2K882! , 3E74!\$23456789! ' 8QQ7EE789C!)96>A9567895I!0847>6S!8D!
 , 3E74!\$23456789#!W7A635I!489D>A>94>#!
 !

b8K9E89=ZA>>90!\$#!c03NQ766>2d#!P5F>A#! (K>!\$4808974!PI5SRA8392!PA8>46H!)QQ>AE7G>0!796>A27E47FI795AS!
 I>5A979R!6KA83RK!Q3E74!79!FA>=E4K88I#!+567895I! " EE84756789!D8A!6K>!\$23456789!8D!@839R! ' K7I2A>9#!
 Y 5EK79R689C!%# ' #!
 !

b8K9E89=ZA>>90!\$#!592! e 7N>AE67EC! , #!c , 5A4K!: ; : d#!P5F>A#!)QQ>AE7G>!Q3E745I!I>5A979R! ?76K!4K7I2A>9!
 ?76K!5367EQ!EF>46A3Q!27E8A2>AH! (K>!\$4808974!PI5SRA8392!PA8>46!56! " T" (\$ ' !T8E689#! , 5EE54K3E>66E!
 , 3E74!\$234568AE! " EE84756789C! " II!0656! ' 89D>A>94>#! , 5AIN8A83RKC! , "#!
 !

b8K9E89=ZA>>90!\$#!c " FA7I!: ; : 1d#! (K>!\$4808974!PI5SRA8392!PA8>46H! " 9!7QQ>AE7G>!Q3E74!>23456789=
 D843E>20!8F>9=544>EEC!Q3I6727E47FI795AS!I>5A979R!>[F>A7>94>#!P5F>A!FA>E>96>2!D8A!6K>!(?>ID6K!
)96>A9567895I!X>E>5A4K!79! , 3E74!\$23456789! ' 89D>A>94>C!0847>6S!D8A!\$23456789C! , 3E74!592!PES4K8I8RS!
 X>E>5A4K#! ' 89D>A>94>!89I79>#!
 !

b8K9E89=ZA>>90!\$#!c " FA7I!: ; : 1d#! ' K7I2A>9JE!536K>9674!E>ID=5EE>EEQ>96! ?76K!Q8N7I>!6>4K98I8RS#!P5F>A!
 FA>E>96>2!5E!F5A6!8D!5!ESQF8E73QC!Z>95!ZA>K>A!592!03f599>T3A689C!4K57AE#! (K>!(?>ID6K!)96>A9567895I!
 X>E>5A4K!79! , 3E74!\$23456789! ' 89D>A>94>C!0847>6S!D8A!\$23456789C! , 3E74!592!PES4K8I8RS!X>E>5A4K#!
 ' 89D>A>94>!89I79>#!
!

b8K9E89=ZA>>90!\$#!c " 3R3E6!: ; : ;d#!(K>!\$4808974!PI5SRA8392!PA8^>46H!)QF546!8D!59!8F>9=544>EEC!
48QQ3976S!836A>54KC!Q3E74!>23456789!FA8RA5Q#!P5F>A!544>F6>2!D8A!6K>!)96>A9567895I!0847>6S!8D!, 3E74!
\$23456789H!W7E789E!8D!\$U376S!592!%7G>AE76S#!O>IE79B7C! / 79I592#!c ' 89D>A>94>F8E6F89>2!23>!68! ' * W)%=1L#d!!

!

' 5I7C! '#!08I>C!, #! g !b8K9E89=ZA>>90!\$#!c " 3R3E6!: ; : ;d#!* NE>AG79R!4K7I2A>9JE!EF89659>83E!Q3E74!
Q5B79RH! ' 3AA>96!2>G>I8FQ>96E!592!7QF546!89!A>E>5A4K!592!6>54K79R#!OSQF8E73Q!544>F6>2!D8A!6K>!
)96>A9567895I!0847>6S!8D!, 3E74!\$23456789H!W7E789E!8D!\$U376S!592!%7G>AE76S#!O>IE79B7C! / 79I592#!
c ' 89D>A>94>F8E6F89>2!23>!68! ' * W)%=1L#d!

!

b8K9E89=ZA>>90!\$#!cb3IS!: ; : ;d#! ' 8QF8E79R!D8A!794I3E789H!)QQ>AE7G>Q3E74!>23456789!79!5!B792>AR5A6>9!
R>9>A5I!Q3E74!4I5EEA88Q#!P8E6>A!544>F6>2!D8A!6K>!' \$5AIS! ' K7I2K882!, 3E74!\$23456789! ' 8QQ7EE789C!
)96>A9567895I!0847>6S!8D!, 3E74!\$23456789H!W7E789E!8D!\$U376S!592!%7G>AE76S#!O>IE79B7C! / 79I592#!
c ' 89D>A>94>F8E6F89>2!23>!68! ' * W)%=1L#d!

!

b8K9E89=ZA>>90!\$#!g !X8E5I>EC!X#!c " FA7I!: ; : ;d#!(K>!\$4808974!PI5SRA8392!PA8^>46H!0 (\$ ", !>23456789!
D8A!4K7I2A>9! ?76K! " 0%#!P5F>A!544>F6>2!D8A!6K>!" T . \$!" EE>QNISH! " A6E!T>66>A!6K>!. 7G>E!8D!\$G>AS89>#!
T8E689C!, "#!c ' 89D>A>94>F8E6F89>2!23>!68! ' * W)%=1L#d!

!

b8K9E89=ZA>>90!\$#!c , 5A4K!: ; : ;d#!T37I279R!)QQ>AE7G>!, 3E745I!\$ [F>A7>94>E!6KA83RK!6K>!' \$4808974!
PI5SRA8392!PA8^>46H! Y 8ABEK8F!FA>E>96>2!56!6K>!, 5EE54K3E>66E!, 3E74!\$234568AE! " EE84756789C! " II!0656>
' 89D>A>94>#T8E689C!, "#!

!

b8K9E89=ZA>>90!\$#!c * 468N>A!: ;1Ld#!, 3E74!56!6K>!' >96>AH! ' A>5679R!, >5979RD3I!592!X>I>G596!, 3E74!
\$23456789!6KA83RK!0 (\$ ", !)QQ>AE789!. >5A979R#!P5F>A!FA>E>96>2!56!6K>!" EE84756789!8D!(>4K98I8RS!
79!, 3E74!)9E6A346789H!(K>! ' 8II>R>!, 3E74!0847>6S!+567895I! ' 89D>A>94>#. 837EG7II>C! e @#!

!

b8K9E89=ZA>>90!\$#!c , 5S!: ;1Ld#! ' K7I2A>9JE!Q3E745I!2>G>I8FQ>96!79!5!48QF8E76789=D843E>2!
0 (\$ ", !=796>RA56>2!7Q>AE789!I>5A979R!>9G7A89Q>96H!X>E3I6E!DA8Q!5!D83A=S>5A!E632S#!P5F>A!
FA>E>96>2!56!6K>W7E789E!8D!X>E>5A4K!79!, 3E74!\$23456789C!6K>!' 89D>A>94>#!PA794>689C!+b#!

!

b8K9E89=ZA>>90!\$#!g!. >>C! '#!c , 5S!: ;1Ld#!(K>!\$4808974!PI5SRA8392H!08475I!546789!6KA83RK!Q3E74!
>23456789C!E3E65795N7I76S!592!0 (\$ ", !)QQ>AE7G>I>5A979R#!P5F>A!FA>E>96>2!56!6K>!W7E789E!8D!X>E>5A4K!
79!, 3E74!\$23456789C!6K>!' 89D>A>94>#!PA794>689C!+b#!

!

b8K9E89=ZA>>90!\$#!c , 5A4K!: ;1Ld#!

#!(5IB!R7G>9!56!&97G>AE76S!8D!, 5EE54K3E>66E!. 8?>II!X7G>A!(5IBE!

0SQF8E73Q#! . 8?>II!, "#!

!

b8K9E89=ZA>>90!\$#!c * 468N>A!: ;1Vd#!

#!P5F>A!FA>E>96>2!56!6K>!" EE84756789!8D!(>4K98I8RS!79!, 3E74!)9E6A346789H!(K>!

' 8II>R>!, 3E74!0847>6S!+567895I! ' 89D>A>94>#!W59483G>AC! ' 59525#!

!

b8K9E89=ZA>>90!\$#!c , 5A4K!: ;1Vd#!

P5F>A!FA>E>96>2!56!6K>!, 5EE54K3E>66E!, 3E74!\$234568AE!

" EE84756789C! " II!0656>!' 89D>A>94>#T8E689C!, "#!

!

b8K9E89=ZA>>90!\$#!c , 5A4K!: ; 1Vd#!

#!P5F>A!FA>E>96>2!56!6K>! , 5EE54K3E>66E! , 3E74!\$234568AE! " EE847567890! " II!0656>! ' 89D>A>94>#!
T8E6890! , "#!

!

b8K9E89=ZA>>90!\$#!c , 5A4K!: ; 1Vd#!

#!(5IB!R7G>9!56!&97G>AE76S!8D! , 5EE54K3E>66E! . 8 ?>II!X7G>A!(5IBE!OSQF8E73Q#!
. 8 ?>II0! , "#!

!

b8K9E89=ZA>>90!\$#!c * 468N>A!: ; 1^d#!

#!P5F>A!FA>E>96>2!56!6K>! " EE84756789!D8A!(>4K98I8RS!79! , 3E74!(>54K79R0! ' 8II>R>!
, 3E74!0847>6S!9567895I!489D>A>94>#!059! " 9689780!(h#!

!

b8K9E89=ZA>>90!\$#!cb3IS!: ; 1^d#!

P5F>A!FA>E>96>2!56!6K>!+567895I!047>94>!(>54K>AE! " EE847567890!0 (\$, !0SQF8E73Q#! * A15928C! / . #!
!

!

b8K9E89=ZA>>90!\$#!cb39>!: ; 1^d#!

P5F>A!FA>E>96>2!56!6K>! , 3E74!\$234568AE!592!X>E>5A4K>AE!8D!@839R! ' K7I2A>9!
c , \$X@ ' d! ' 89D>A>94>#! ' 5QNA72R>!&97G>AE76S0!\$9RI592#!

!

b8K9E89=ZA>>90!\$#!cb3IS!: ; 1^d#!

P5F>A!FA>E>96>2!56!6K>! , 5EE54K3E>66E!

, 3E74!\$234568AE! " EE847567890! " II!0656>! ' 89D>A>94>#!T8E6890! , "#!

!

b8K9E89=ZA>>90!\$#!cb3IS!: ; 1]d#!

#!P5F>A!FA>E>96>2!56!6K>!)96>A9567895I!0847>6S!D8A! , 3E74!

\$23456789!\$279N3ARC!0486I592#!

!!

b8K9E89=ZA>>90!\$#!cb3IS!: ; 1]d#!

#!P8E6>A!FA>E>96>2!56!6K>!)96>A9567895I!0847>6S!D8A! , 3E74!\$23456789!\$279N3ARK!0486I592#!

!

b8K9E89=ZA>>90!\$#!cb39>!: ; 1]d#

#! Y>N795A!R7G>9!D8A!6K>!+567895I!
" EE84756789!D8A! , 3E74!\$23456789!c + " D , \$d0!)9=E>AG74>! ' 89D>A>94>#!

!

b8K9E89=ZA>>90!\$#!cb3IS!: ; 1]d#!

#!P5F>A!FA>E>96>2!56!6K>!

, 5EE54K3E>66E! , 3E74!\$234568AE! " EE847567890! " II!0656>! ' 89D>A>94>#!T8E6890! , "#!

!

b8K9E89=ZA>>90!\$#!cb3IS!: ; 1]d#!

#!(5IB!R7G>9!592!F8E6>A!FA>E>96>2!56!6K>!
& , 5EE54K3E>66E! . 8 ?>II! / 543I6S!X>E>5A4K!0SQF8E73Q#! . 8 ?>II0! , "#!

!

b8K9E89=ZA>>90!\$#!cb3IS!: ; 1]d#!

#!(5IB!R7G>9!56!&97G>AE76S!8D!

, 5EE54K3E>66E! . 8 ?>II!X7G>A!(5IBE!OSQF8E73Q#! . 8 ?>II0! , "#!

!

b8K9E89=ZA>>90!\$#!cb3IS!: ; 1 \d#!

H!

b8K9E89=ZA>>9C!\$#! " #cb3IS!: ; 1Md#!

#!P5F>A!FA>E>96>2!56!6K>!+567895I!

" EE84756789!D8A!6K>!\$23456789!8D!@839R! ' K7I2A>9!c+ " \$@ ' d! ' 89D>A>94>H!% !FA>E

' 3E682>A8C! . #! " #!b8K9E89=ZA>>90!\$#! " #! g !(7QQ>AC! /#! . #!cb3IS!: ; ;Md#!P8E6>A#!
!P8E6>A!

FA>E>96>2!56!6K>!)96>A9567895I!0847>6S!D8A! , 3E74!\$23456789! ' 89D>A>94>H!(K>! , 3E745I! Y 8AI2E!8D!
' K7I2A>9#! (>9>A7D>C! (K>! ' 595AS!)EI592E#!

!

' 3E682>A8C! . #! " #!b8K9E89=ZA>>90!\$#! " #! g !(7QQ>AC! /#! . #!c , 5S!: ; ;<d#!

:;1\=:;1]!
9-';-';-

P0(0)"2,\$)2;':';'0(\$

!

@- :0- ;+"\$>"+X02;\$K0) ?\$) - ?\$K0) ?\$@- :0(; '4); +"\$

!

(K>!\$OPP!D843E>E!89! ?8AB79R! ?76K!4K7I2A>9!8D!5H!5R>E!68!2>E7R9C!N37I

%#)+0(X& '()*+!X\$. ."(\$%!" '()W)(@!
 !
 1# (>54K79R!
 \$
9 - ?0"4")?6);0\$K0:0\$
 !
 ^!S>5AE! , &\$%#M: ; ;H!Z>9>A5I! , 3E74! , >6K82E!1!c0>978AEd!
 ! ' 8A>!43AA743I3Q!483AE>!D8A!Q5`8AE!
 ! " 2G594>2!I>G>I!6>54K79R!Q>6K82E!I>463A>127E43EE789!4I5EE!
 !
 ^!S>5AE! , &\$%#<; ; ;H!*NE>AG56789!.5N8A568AS!<!c0>978AEd!
 ! ' 8A>!43AA743I3Q!483AE>!D8A!Q5`8AE!
 ! PA>=FA546743Q!6>54K79R!>[F>A7>94>!
 ! , " !E656>!Q59256>2!
 !
]!S>5AE! , &\$%#1\1; ;H!)96A82346789!68!, 3E74!\$23456789!c/A>EKQ>9d!
 ! ' 8A>!43AA743I3Q!483AE>!
 ! /8392567895!E632S!8D!Q3E74!>23456789!6K>8AS!592!FA54674>!
 !
]!S>5AE! , &\$%#1; ; ;H!*NE>AG56789!.5N8A568AS!1!c/A>EKQ>9d!
 ! *NE>AG56789E!8D!4K7I2A>9JE!Q3E745I!F5A6747F56789!79!F3NI74!E4K88I!!
 ! , " !E656>!Q59256>2!
 !
 <!S>5AE! , &\$%#M<; ; ;H!*NE>AG56789!.5N8A568AS!M!c0>978AEd!
 ! ' 8A>!43AA743I3Q!483AE>!D8A!Q5`8AE!
 ! " 2G594>2!I>G>I!6>54K79R!Q>6K82E!I>463A>127E43EE789!4I5EE!
 !
 <!S>5AE! , &\$%#M; ; ;H!*NE>AG56789!.5N8A568AS!M!c0>978AEd!
 ! ' 8A>!43AA743I3Q!483AE>!D8A!Q5`8AE!
 ! PA>=FA546743Q!6>54K79R!>[F>A7>94>!
 ! , " !E656>!Q59256>2!
 !
]!S>5A! , &\$%#:ML; ;H!PA8RA>EE/G>!P>AD8AQ594>!592!PA82346789!P>25R8RS!
 c08FK8Q8A>E!592!b3978AEd!
 ! ' 8A>!43AA743I3Q!483AE>!
 ! (>4K97U3>E!D8A!6>54K79R!79!48QQ397S!Q3E74!4896>[6E!
 !
]!S>5AE! , &\$%#ML] ; ;H!%7A>46>2!0632S!79!, 3E74!\$23456789!
 ! /843E>2!89!O898AE!6K>E>E!592!EF>475I!FA8>46E!
 / ")?6);0\$K0:0\$
 !
 ^!S>5AE! , &\$%#\1; ; ;H!/839256789E!8D!, 3E74!\$23456789!
 ! , 3E74!>23456789!6K>8AS!592!FK7I8E8FKS!
 !
 !

<!\$>5AE! , &\$%#] \ ; ;H!X>E>5A4K!79! , 3E74!\$23456789!
! PA546745I!5FFI74567

