*! "#$%&" ' ( ) *+) ( ) *" (, +- . %) / (0 "1+) " (2+) 34 / ( ) *" (+ 5 "1 ' 5 "1) # ( ) $ ( ) *" (, +- . %) / (6$1#) 3) .) 3$1 (7 *3- *(+2" (#. 5 5 +238" ' (9 "%$7 (+1 ' (73) *(+ 5 "1 ' 5 "1) #(*3: *%3: *) " ' (31 (4$%%$ 731 : (' $- . 5 "1);(*

!

" # $ $ % & ' ! ( ) ! * & (* (" + , ! - (. " / 0 / # / 0 (. % 1 ! % $ + . , $ + . / " !

!

#$%! & ' % ( ) *+ , %! - . / / +**%%! . 0! *$%! 12 ( ) 3*4! 5%62*%! 78 . 7 . 9%9! *$%! 0 . 33 . : +6 ; ! 2 / %6< / %6*9! * . ! *$%! 12 ( ) 3*4! - . 69*+*) *+ . 6=!>6!*$%!9) / / 284!?%3 . : @!*$%!28*+ (3%!26<!9% (*+ . 6!6) / ?%89!8%0%8!* . !*$%!6) / ?%8+6 ; !+6!*$%!78 . 7 . 9%<! 2 / %6<%<! - . 69*+*) *+ . 6@! 6 . *! +6! *$%! ( ) 88%6*! - . 69*+*) *+ . 6=! ! #$%! 2**2 ($%<! < . ( ) / %6*! $29! *$%! 78 . 7 . 9%<! 2 / %6< / %6*9A ($26 ; %9!$+ ; $3+ ; $*%<!+6!8%<=!

!

"=!!B<<+6 ; !326 ;) 2 ; %! <%0+6+6 ; ! / %%*+6 ; 9!26<!233 . : %<! / %%*+6 ; ! / . <23+*+%9!C**%234567!008!"75349 : ! ; <!= : >!**

%234567!?8!"75349 : !@D!E!#$%!6%%<!0 . 8!*$+9!2<<+*+ . 6!(. / %9!08 . / !F . ?%8*G9!F) 3%9!HIJK!26<!HIJ "I!

2= LHIJK!E! **+A37 : B49 : !9C! * =264=D7 : 3=2E! 1 =F!39! +675329 : 45! $ 7734 : GBH!** & ' (%7*!29!2) *$. 8+M%<!

*! "#$%&# ' ( ) *+ ,*

!

`29%<!)7.6!*$%!78+6(+73%!.0!9$28%<!;.,%8626(%@!:%!*$%!12()3*4@!+6!.8<%8!*.!0)334!%6;2;%!+6!*$2*!;.,%8626(%@!<.!$%8%?4!2<.7*!*$+9!-.69*+*)*+.6=!

!

%& / 0 - 1 +!0#!. % $ +!% . ,!* # &* (" +!

!

*** # &* ("** +L!>6!9)7%89%<+6;!*$%!78%,+.)9!-.69*+*)*+.6!.0!*$%!12()3*4!B99%/?34!.0!F+($28<!5*.(V*.6!-.33%;%@!*$+9!-.69*+*)*+.6!(8%2*%9!2!12()3*4!9%62*%!*.!9%8,%!29!*$%!8%78%9%6*2*+,%!?.<4!%3%(*%<!?4!*$%!12()3*4!*.!78.,+<%!2!12()3*4!,.+(%!+6!*$%!0.8/)32*+.6!.0!T6+,%89+*4!7.3+(4@!:$+3%!/.<+04+6;!*$%!8.3%!.0!*$%!12()3*4!B99%/?34=

P= **. % $ +**L!#$%!62/%!.0!*$%!6%:!?.<4!9$233!?%!*$%!12()3*4!5%62*%!.0!5*.(V*.6!T6+,%89+*4@!$%8%+6!8%0%88%<!*.!29!*$%!L5%62*%=R!!

!

2D &'(%7*!29!.*$%8:+9%!78.,+<%<@!/%%*+6;9!.0!*$%!12()3*4!B99%/?34@!5%62*%@!!26<!
-./ /+**%%9!/24!?%!(.6<)(*%<!C0)334!.8!+6!728*D!*$8.);$!)9%!.0!>6*%86%*!/%%*+6;!
9%8,+(%9!<%9+;62*%<!?4!*$%!U8%9+<%6*!.8!-$2+8!*$2*!9)77.8*!26.64/.)9!,.*+6;!26<!
9)77.8*!,+9+?3%!<+97324 9!+<%6*+04+6;!*$.9%!728*+(+72*+6;@!+<%6*+04+6;!*$.9%!9%%V+6;!

X= **S # (&# $** L!B!Q) . 8) / !0 . 8!12( )3*4!B99% / ?34! / %%*+6 ; 9!9$233!?%!PK g ! . 0!*$%! / % / ?%89$+7=!!

[= **&+ I +&"%1! ( )!"+ . % / +!% - / 0 (.** L!#$%!12( )3*4!B99% / ?34@!?4!2!U%*+*+ . 6!9+ ; 6%<!?4!2*! 3%29*! . 6%S*$+8<! . 0!+*9! / % / ?%89!6 . !32*%8!*$26!* : . !B(2<% / +(! e %%V9!20*%8!26!2(*+ . 6!?4!*$%! 5%62*%!+9!8%7 . 8*%<!* . !*$%!12( )3*4!B99% / ?34@! / 24!(233!0 . 8!2!12( )3*4!B99% / ?34! , . *%!* . ! 8% , %89%!*$%!2(*+ . 6=!B! , . *%! /)9*!?%!$%3<!6 . !32*%8!*$26!* : . !B(2<% / +(! e %%V9!20*%8!*$%! U8%9+<%6*G9!8%(%+7*! . 0!2!U%*+*+ . 6! : +*$!2!9)00+(+%6*!6) / ?%8! . 0!12( )3*4!9+ ; 62*)8%9=!>0!2*!3%29*! * : . S*$+8<9! . 0!*$%!12( )3*4!B99% / ?34! , . *%!0 . 8!8% , %8923@!*$%!2(*+ . 6! . 0!*$%!5%62*%!9$233!?%! 8% , %89%<=!

!

%& / 0 - 1 +! I ℍ! / Q +!"+ . % / +!

!

"= **+ 1 0O 0M 0 1 0 / ' !) (&!"+ . % / +! $ + $ M+&"Q0*** L!&3+ ; +?+3+*4!0 . 8!5%62*%! / % / ?%89$+7! +9!3+ / +*%<!* . !12( )3*4! / % / ?%89=!

P= **- ($ * ("0 / 0 (. ! ( )!"+ . % / +** L!!#$%!5%62*%!9$233!?%!(. / 7 . 9%<! . 0!*$%!U8%9+<%6*@!*$%! b+(%!U8%9+<%6*@!*$%!5%(8%*284@!*$%!U8%9+<%6*! . 0!*$%!T6+ . 6! . 8!2!<%9+ ; 6%%!C%'! . 00+(+ . D@!26<! . 6%!5%62* . 8!0 . 8!% , %84!*%6!12( )3*4! / % / ?%89!9%8 , +6 ; !+6!*$%!T6+ , %89+*4!29! . 0!] 28($!"! . 0! *$%!%3%(*+ . 6!4%28@!%3%(*%<!29!9%*!0 . 8*$!+6!*$+9!B8*+(3%=!

J= **" - Q ((1!"+ . % / (&"** L!&2($!5($ . . 3!9$233!%3%(*! . 6%!5%62* . 8=!!

X= **"+ . % / (&"!% / !1%&O+** L!#$%!8% / 2+6+6 ; !5%62* . 89!9$233!?%!%3%(*%<!2*!328 ; %!?4!26<! 08 . / !*$%!12( )3*4!B99% / ?34=!

[= **% , T# . - / !10%0" (.** L!#$%!U8%9+<%6*@!+6!(. 69)3*2*+ . 6! : +*$!*$%!&'%( )*+ , %! - . / / +**%%@! 9$233!277 . +6*!26!2<W)6(*!+69*8)(* . 8!* . !9%8 , %!29!6 . 6S , . *+6 ; !B<W)6(*!Y+2+9 . 6!* . !*$%!5%62*%=!!

\= **(M"+& I +&"** L!5%62*%! / %%*+6 ; 9!9$233!?%! . 7%6!* . !*$%!T6+ , %89+*4!(. / /)6+*4!)63%99!*$%! 5%62*%! , . *%9!* . !(3 . 9%!2!9%99+ . 6=!12( )3*4! / % / ?%89!26<!*$%!U8 . , . 9*! . 8!2!<%9+ ; 6%%!9$233!?%! ; + , %6!26! . 77 . 8*)6+*4!* . !97%2V!?%0 . 8%!26!2(*+ . 6!+9!*2V%6=!h*$%8! . ?9%8 , %89! / 24!?%! 233 . : %<!* . !97%2V!2*!*$%!<+9(8%*+ . 6! . 0!*$%!78%9+<+6 ; ! . 00+(%8@!?)*! . 634!5%62* . 89! / 24! , . *%=!!

c= **+ 1 + - / 0 (.** "L!5($ . . 3!5%62* . 89!9$233!?%!%3%(*%<!+6!B78+3! . 0! . <<S6) / ?%8%<!(23%6<28! 4%289!CB78+3!PK""@!B78+3!PK"J@!%*(=D!26<!2*S328 ; %!5%62* . 89!+6!B78+3! . 0!% , %6S6) / ?%8%<! (23%6<28!4%289!CB78+3!PK"K@!B78+3!PK"P@!%*(=D=!!5%62* . 89!9$233!9%8 , %!0 . 8!2!*%8 / ! . 0!* : . ! 4%289!?% ; +66+6 ; ! . 6!*$%!0+89*!<24! . 0!*$%!1233!9% / %9*%8!0 . 33 . : +6 ; !*$%+8!%3%(*+ . 6=!

O= **I % - % . - 0+"** L!B! , 2(26(4! . (( )89! : $%6!2!5%62* . 8!8%9+ ; 69!08 . / !*$%!5%62*%@!3 . 9%9!$+9! . 8! $%8!%3+ ; +?+3+*4!0 . 8!5%62*%! / % / ?%89$+7@! . 8!+9!8% / . , %<!?4!5%62*%!2(*+ . 6@! . 8!+6!*$%!(29%! . 0! 2!5%62* . 8!%3%(*%<!08 . / !2!5($ . . 3@! : $%6!$%! . 8!9$%!3%2 , %9!*$2*!5($ . . 3=!>0!2!5%62*%!9%2*! 0+33%<!?4!2!5($ . . 3!%3%(*+ . 6!?%(. / %9! , 2(26*@!*$%!5($ . . 3!9$233!%3%(*!2!8%732(% / %6*!* . !0+33! .)*!*$%!*%8 / =!>0!26!2*S328 ; %!9%2*!?%(. / %9! , 2(26*@!*$%!(26<+<2*%! : $. !8%(%+ , %<!*$%!6%'*! $+ ; $%9*!6) / ?%8! . 0! , . *%9!+6!*$%! / . 9*!8%(%6*!2*S328 ; %!%3%(*+ . 6!9$233!(. / 73%*%!*$%!*%8 / =!>0!

\= **S # (&# $** L!B!Q) . 8) / !0 . 8!& ' %( ) *+ , %! - . / / +**%%! / %%*+6 ; 9!9$233!?%!2! / 2W . 8+*4! . 0!*$%! (. / / +**%%G9! / % / ?%89=!

c= **(M" + & I + &"** L!] %%*+6 ; 9! . 0!*$%!& ' %( ) *+ , %! - . / / +**%%!9$233!?%!(3 . 9%<!% ' (%7*!?4! +6 , +*2*+ . 6=!! h634! / % / ?%89! . 0!*$%!& ' %( ) *+ , %! - . / / +**%%! / 24! , . *%=!!

O= **&+* (& / "** L!#$%!& ' %( ) *+ , %! - . / / +**%%!9$233!78%728%!26!266)23!8%7 . 8*!* . !*$%!12( )3*4! B99% / ?34! . 6!*$%! : . 8V! . 0!*$%!5%62*%=!!

H= **&+1% / 0 (. "Q0*! R 0 / Q! / Q+!# . 0 (.** L!#$%!& ' %( ) *+ , %! - . / / +**%%!9$233!?%! / +6<0)3! . 0! *$%!3% ; 23!8+ ; $*9!26<!8%97 . 69+?+3+*+%9!(. 6*2+6%<! : +*$+6!*$%!8%3%, 26*!(. 33%(*+, %!?28 ; 2+6+6 ; ! 2 ; 8%% / %6*9!26<!%69)8%!*$2*!2(*+ . 69! . 0!*$%!5%62*%!< . !6 . *!+6*8)<%! . 6!28%29!78 . 7%834!*$%! (. 6(%86! . 0!*$%!(. 33%(*+, %!?28 ; 2+6+6 ; !2 ; %6*=!

!

%& / 0 - 1 +! I 000H!! / Q+! - ($ $ 0 / / ++"! ( )! / Q+!" + . % / +!

!

"= **- &+% / 0 (. !% . , ! , 0"" (1 # / 0 (. ! ( )!" / % . , 0 . O! - ($ $ 0 / / ++"!% . , ! / %" P!) (& - +"** L!#$%!5%62*%!9$233!$2 , %!* : . !(2*% ; . 8+%9! . 0! - . / / +**%%9I!9*26<+6 ; !(. / / +**%%9! 26<!*29V!0 . 8(%9=! a . * : +*$9*26<+6 ; !*$%!%6) / %82*+ . 6! . 0!9*26<+6 ; !(. / / +**%%9!+6!*$+9!B8*+(3%@! *$%!5%62*%!9$233!$2 , %!*$%!7 . : %8!* . !78 . 7 . 9%!* . !*$%!12( )3*4!B99% / ?34!*$%!(8%2*+ . 6! . 0!6% : ! 9*26<+6 ; !(. / / +**%%9@!($26 ; %9!+6!*$%+8!(. / 7 . 9+*+ . 6@! . 8!*$%!<+99 . 3)*+ . 6! . 0!% ' +9*+6 ; !9*26<+6 ; ! (. / / +**%%9=!>6!*$%!% , %6*! . 0!2< / +6+9*82*+ , %!8% . 8 ; 26+M2*+ . 6!*$2*!($26 ; %9!*$%!*+*3%9! . 0!264! . 0! *$. 9%!+<%6*+0+%<!29!% ' ! . 00+(+ . ! / % / ?%89! . 0!2!(. / / +**%%@!*$%!& ' %( ) *+ , %! - . / / +**%%! / 24! 2778 . , %!9)?9*+*)*+ . 6! . 0!%Q)+, 23%6*!% ' ! . 00+(+ . ! / % / ?%89=!B33! . *$%8!($26 ; %9!8%Q)+8%!9+ / 73%! / 2W . 8+*4!2778 . , 23!?4!*$%!12( )3*4!B99% / ?34!*$8 .) ; $!2!8%0%8%6<) / !29!<%9(8+?%<!+6!B8*+(3%! b@!5%(*+ . 6!"P=! a % : !9*26<+6 ; !(. / / +**%%9!9$.)3<!78 . , +<%!?23 26(%<!8%78%9%6*2*+ . 6!08 . / ! 2(8 . 99!*$%!T6+, %89+*4!(. / 7282?3%!* . !*$2*! . 0!%' +9*+6 ; !9*26<+6 ; !(. / / +**%%9=!&+*$%8!*$%! 5%62*%! . 8!*$%!& ' %( ) *+ , %! - . / / +**%%! / 24!(8%2*%!6% : !*29V!0 . 8(%9=!#29V!0 . 8(%9!9$233!?%! 2)*. / 2*+(2334!<+99 . 3 , %<!2*!*$%!%6<! . 0!*$%!2(2<% / +(!4%28!+6! : $+($!*$%4! : %8%!(8%2*%<@!)63%99!97%(+0+(2334!(. 6*+6)%<!?4!*$%!5%62*%! . 8!*$%!& ' %( ) *+ , %! - . / / +**%%=!!

P= **+ 10O0M010 / ' !) (&! - ($ $ 0 / / ++! $ + $ M+&" Q0*** L!#$%!($2+89! . 0!9*26<+6 ; ! (. / / +**%%9! /)9*!?%!12( )3*4! / % / ?%89!?)*!6%%<!6 . *!?%!5%62*. 89=!#$%! , +(%!($2+89! . 0! 9*26<+6 ; !(. / / +**%%9! /)9*!?%!5%62*. 89=! e $%8%!2778 . 78+2*%!?%(2)9%! . 0!*$%+8!97%(+23!62*)8%@! (. / / +**%%9! / 24!+6(3)<%!6 . 6S , . *+6 ; ! / % / ?%89!08 . / ! .)*9+<%!*$%!12( )3*4@!?)*!+6!6 . !(29%! : +33!2!6 . 6S12( )3*4! / % / ?%8!?%!2! , . *+6 ; ! / % / ?%8@!9%8 , %!29!2!($2+8@! . 8!9%8 , %!29! , +(%!($2+8! . 0! 2!9*26<+6 ; !(. / / +**%%=!!

J= **" + 1 + - / 0 (. ! ( )! - Q%0&"! ( )!" / % . , 0 . O! - ($ $ 0 / / ++"** L! - $2+89! . 0!9*26<+6 ; ! (. / / +**%%9!9$233!?%!%3%(*%<!2*!328 ; %!?4!*$%!12( )3*4!B99% / ?34!+6!B78+3! . 0!% , %6S6) / ?%8%<! (23%6<28!4%289=! - $2+89!9$233!9%8 , %!* : . S4%28!*%8 / 9!* . !?% ; +6! . 6!*$%!0+89*!<24! . 0!*$%!1233! 9% / %9*%8!0 . 33 . : +6 ; !*$%+8!%3%(*+ . 6=!

X= **, # / 0 + "! ( )! - Q%0&"! ( )!" / % . , 0 . O! - ($ $ 0 / / ++"** L!!#$%!($2+8! . 0!%2($!9*26<+6 ; ! (. / / +**%%!9$233I!

2D (. 6 , %6%!*$%!9*26<+6 ; !(. / / +**%%!8% ;)3283 4!26<!?%!8%97 . 69+?3%!0 . 8!+*9! : . 8V@!26<!

?D 9)? / +*!* . !*$%!5%62*%! . 823!26<! : 8+***%6!8%7 . 8*9!29!<%9(8+?%<!+6!9%(*+ . 6!"K! . 0!*$+9! B8*+(3%=!

[= **" + 1 + - / 0 (. ! ( )!&+*&+" + . / % / 0 I + "! / (!" / % . , 0 . O! - ($ $ 0 / / ++"** L!

F%9%28($!26<!U8.0%99+.623!Z%,%3.7 / %6*@!.6%!8%78%9%6*2*+,%!08. / !*$%!Y+?8284!9$233!?%!
%3%(*%<!%2($!%,%6.<<S6) / ?%8%<!(23%6<28!4%28@!26<!.6%!8%78%9%6*2*+,%!08. / !%2($!.0!*$%!
.*$%8!5($..39!9$233!?%!%3%(*%<!%2($!4%28=!B33!8%78%9%6*2*+,%9!*.!9*26<+6;!(. / / +**%%9!
%3%(*%<!7)89)26*!*.!*$+9!9%(*+.6!9$233!9%8,%!*:.S4%28!*%8 / 9!*.!?%;+6!.6!*$%!0+89*!<24!.0!*$%!
1233!9% / %9*%8!0.33.:+6;!*$%+8!%3%(*+.6=!

\= **"+1+-/0(.!()!I0-+!-Q%0&"!()!"/%.,0.O!-($$0//++"**L!!a.!32*%8!*$26!
0.)8!B(2<% / +(!e%%V9!20*%8!*$%!?%;+66+6;!.0!%,%84!1233!9% / %9*%8@!*$%!5%62*%!9$233!%3%(*!2!
5%62*.8!*.!9%8,%!29!,+(%!($2+8!.0!%2($!9*26<+6;!(. / / +**%%=!#$%!,+(%!($2+8! / 24@!?)*!6%%<!
6.*!?%@!%3%(*%<!08. / !2 / .6;!5%62*.89!238%2<4!9%8,+6;!.6!*$2*!9*26<+6;!(. / / +**%%!29!
5($..3!8%78%9%6*2*+,%9!.8! j S(.6,%6%89=!&2($!,+(%!($2+8!9$233!?%;+6!9%8,+6;!2!.6%S4%28!
%8 / !+ / / %<+2%34!)7.6!%3%(*+.6=!

c= **,#/0+"!()!I0-+!-Q%0&"!()!"/%.,0.O!-($$0//++"**L!!#$%!,+(%!($2+8!.0!**
%2($!9*26<+6;!(. / / +**%%!9$233I!

2D 9%8,%!29!2!3+2+9.6!?%*:%%6!*$%!5%62*%!26<!*$2*!9*26<+6;!(. / / +**%%@!!

?D 299+9*!*$%!($2+8@!26<!

(D 7%80.8 / !*$%!<)*+%9!.0!*$%!($2+8!+6!$+9!.8!$%8!2?9%6(%!.8!+6(272(+*4=!

O= **"+1+-/0(.!()!$+$M+&"!()!/%"P!)(&-+"**L!#$%!5%62*%!9$233!%3%(*!*$%!($2+89!
26<!/%/?%89!.0!*29V!0.8(%9@!:$.!9$233!?%;+6!9%8,+6;!+/ / %<+2*%34!)7.6!%3%(*+.6=!#$%!
5%62*%!/24!<%3%;2*%!*$+9!7.:%8!*.!*$%!&'%()*+,%!-./ / +**%%=!!

H= **%""0O.$+./!()!R(&P**L!#$%!&'%()*+,%!-./ / +**%%!9$233!299+;6!?)9+6%99!*.!
2778.78+2*%!-./ / +**%%9@!26<!*$%!5%(8%*284!9$233!?%!8%97.69+?3%!0.8!(.6,%4+6;!*$%!
299+;6 / %6*9!*.!*$%!-./ / +**%%9!26<!*.!*$%!12()3*4=!

"K= **&+*(&/0.O**L!B33!-./ / +**%%9!28%!8%97.69+?3%!*.!*$%!5%62*%=!h6(%!2!4%28@!?4!2!<2*%!
%9*2?3+9$%<!?4!*$%!5%62*%@!%2($!9*26<+6;!(. / / +**%%!9$233!9)? / +*!*.!*$%!5%62*%!2!:8+**%6!
8%7.8*!.6!+*9!2(*+,+*+%9=!#29V!0.8(%9!9$233!8%7.8*!+6!:8+*+6;!*.!*$%!5%62*%!2*!*$%!%6<!.0!*$%+8!
:.8V!.8!?4!2!<2*%!%9*2?3+9$%<!?4!*$%!5%62*%=!#$%!U8%9+<%6*!/24@!08. / !*+ / %!*.!*+ / %@!
8%Q)+8%!9*26<+6;!(. / / +**%%9!26<!*29V!0.8(%9!*.!78%9%6*!2<<+*+.623!:8+**%6!.8!.823!8%7.8*9!
.!$%!5%62*%=!

""= **&+-($$+.,%/0(.**"L!-./ / +**%%!8%(./ /%6<2*+.69!8%Q)+8+6;!5%62*%!2(*+.6@!
.;%$%8!:+*$!-./ / +**%%!8%7.8*9!8%32*%<!*.!9)($!2(*+.6@!9$233!?%!732(%<!?%0.8%!*$%!5%62*%!
?4!*$%!b+(%!U8%9+<%6*=!

"P=

%3%(*+.6f!26<!+6!*$%!(29%!.0!2!/%/?%8!.*$%8!*$26!2!($2+8@!,+(%!($2+8@!.8!5($..3!
8%78%9%6*2*+,%@!?4!26!2778.78+2*%!/%*$.<=!!

"[= **+.#$+&%/0(.!()!"/%.,0.O!-($$0//++"**L!#$%!+6+*+23!9*26<+6;!(./ /+**%%9!**
.0!*$%!5%62*%@!*$%+8!28%29!.0!(.6(%86@!26<!*$%+8!/%/?%89@!2728*!08./!*$%!8%97%(*+,%!($2+89!
26<!,+(%!($2+89@!28%!29!0.33.:9I!!!!

2D #$%!-**9DD43377!9:!%5=>7D45!*9**64547B!$29!.,%89+;$*!26<!2<,+9.84!8%97.69+?+3+*4!
0.8!233!()88%6*!U8.;82/9@!?.*$!)6<%8;82<)2*%!26<!;82<)2*%@!26<!2<<8%99%9!233!
297%(*9!.0!U8.;82/!()88+()3)/9@!2(2<%/+(!7.3+(+%9!26<!78.(%<)8%9@!26<!2(2<%/+(!
2<,+9+6;=!]%/?%89I!h6%!/%/?%8!%3%(*%<!?4!26<!08./!*$%!12()3*4!.0!%2($!5($..3@!
:.!/%/?%89!6./+62%<!08./!2/.6;!*$.9%!12()3*4!*%2($+6;!;82<)2*%!(.)89%9!26<!
%3%(*%<!2*!328;%!?4!*$%!12()3*4@!*$%!Z%26!.0!*$%!5($..3!.0!j%6%823!5*)<+%9!d!
j82<)2*%!&<)(2*+.6!Z+8%(*.8!.0!j82<)2*%!&68.33/%6*!]262;%/%6*!C%'S.00+(+.D@!
26.*$%8!Z%26!($.9%6!?4!*$%!U8.,.9*!!C%'S.00+(+.D@!*$%!U8.,.9*!.8!<%9+;6%%!C%'S
.00+(+.D@!26<!2!?28;2+6+6;!)6+*!8%78%9%6*2*+,%!277.+6*%<!?4!*$%!U8%9+<%6*!.0!*$%!
T6+.6!C%'S.00+(+.D=!h6%!)6<%8;82<)2*%!9*)<%6*!26<!.6%!;82<)2*%!9*)<%6*!9$233!?%!
277.+6*%<!*.!9%8,%!29!6.6S,.*+6;!3+2+9.69=!!

?D #$%!-**9DD43377!9:!%5=>7D45!*29G2=DB!=:>!*6=::4:G!8%(./%6<9!2!3.6;S
826;%!7326!0.8!)6<%8;82<)2*%!26<!;82<)2*%!%<)(2*+.6!26<!8%,+%:9!26<!2778.,%9!
6%:!<%;8%%S;826*+6;!78.;82/9!2*!?.*$!)6<%8;82<)2*%!26<!;82<)2*%!3%,%39=!
]%/?%89I!h6%!/%/?%8!%3%(*%<!?4!26<!08./!*$%!12()3*4!.0!%2($!5($..3@!*:.!
/%/?%89!6./+62*%<!08./!2/.6;!*$.9%!12()3*4!*%2($+6;!;82<)2*%!(.)89%9!26<!
%3%(*%<!2*!328;%!?4!*$%!12()3*4@!*$%!Z%26!.0!*$%!5($..3!.0!j%6%823!5*)<+%9!d!
j82<)2*%!&<)(2*+.6Z+8%(*.8!.0!j82<)2*%!&68.33/%6*!]262;%/%6*!C%'S.00+(+.D@!
26.*$%8!Z%26!($.9%6!?4!*$%!U8.,.9*!C%'S.00+(+.D@!*$%!U8.,.9*!.8!2!<%9+;6%%!C%'S
.00+(+.D@!26<!2!?28;2+6+6;!)6+*!8%78%9%6*2*+,%!277.+6*%<!?4!*$%!U8%9+<%6*!.0!*$%!
T6+.6!C%'S.00+(+.D=!h6%!)6<%8;82<)2*%!9*)<%6*!26<!.6%!;82<)2*%!9*)<%6*!9$233!?%!
277.+6*%<!*.!9%8,%!29!6.6S,.*+6;!3+2+9.69=!!

(D #$%!-**9DD43377!9:!%>D4:4B32=349:!W!)4:=:57!$29!.,%89+;$*!26<!2<,+9.84!
8%97.69+?+3+*4!0.8!233!/2**%89!.0!?)<;%*!26<!0+626(%9@!26<!233!Q)%9*+.69!.0!
+69*+*)*+.623!78+.8+*+%9!26<!8%9.)8(%9=!]%/?%89I!h6%!/%/?%8!%3%(*%<!?4!26<!08./!
*$%!12()3*4!.0!%2($!5($..3@!*$%!-$+%0!1+626(+23!h00+(%8!.8!2!<%9+;6%%!C%'S.00+(+.D@!
26<!2!?28;2+6+6;!)6+*!8%78%9%6*2*+,%!277.+6*%<!?4!*$%!U8%9+<%6*!.0!*$%!T6+.6!C%'S
.00+(+.D=!

<D #$%!-**9DD43377!9:!O7:72=6!"3X>47B!$29!.,%89+;$*!26<!2<,+9.84!8%97.69+?+3+*4!0.8!
233!297%(*9!.0!*$%!j%6%823!5*)<+%9!U8.;82/=!]%/?%89I!#$%!-..8<+62*.8!.0!*$%!
18%9$/26!5%/+628!U8.;82/!26<!*$%!j S(.6,%6%89@!%3%(*%<!2*!328;%!?4!26<!08./!*$%!
12()3*4f!*$%!Z%26!.0!j%6%823!5*)<+%9!C%'S.00+(+.Df!*$%!U8.,.9*!.8!2!<%9+;6%%!C%'S
.00+(+.Df!26<!2!?28;2+6+6;!)6+*!8%78%9%6*2*+,%!277.+6*%<!?4!*$%!U8%9+<%6*!.0!*$%!
T6+.6!C%'S.00+(+.D=!B<<+*+.623!,.*+6;!/%/?%89!9$233!?%!%3%(*%<!29!0.33.:9I!B9!
9..6!29!782(*+(2?3%!+6!%2($!.<<S6)/?%8%<!(23%6<28!4%28@!.6%!/%/?%8!9$233!?%!
%3%(*%<!?4!26<!08./!*$%!12()3*4!.0!264!5($..3!*$2*!+9!6.*!238%2<4!8%78%9%6*%<!.6!
$%!-../+**%%!?4!%+*$%8!2!jS(.6,%6%8!.8!$%!18%9$/26!5%/+628!-..8<+62*.8=!

%D #$%!-**9DD43377!9:!!0:C92D=349:!/75K:969GE!=:>!$7>4=!"72Y457B!$29!2<,+9.84!
8%97.69+?+3+*4!0.8!233!/2**%89!.0!2(2<%/+(!(./7)*+6;@!<+9*8+?)*+,%!%<)(2*+.6@!
/%<+2!9%8,+(%9!26<!8%32*%<!+60.8/2*+.6!*%($6.3.;4!+60829*8)(*)8%=!]%/?%89I!h6%!
/%/?%8!%3%(*%<!?4!26<!08./!*$%!12()3*4!.0!%2($!5($..3@!*$%!Z+8%(*.8!Y+?8284!

!

<249!?%0.8%!*$%!%3%(*+.6@!26<!2!0+6223!3+9*!.0!(26<+<2*%9!9$233!?%!(+8()32*%<!6.!32*%8!*$26!.6%!
:.8V+6;!<24!20*%8!6./+62*+.69!(3.9%=!

X= **+1+-/0(."!R0/Q0.!/Q+!"-Q((1"**L!&3%(*+.69!.0!*$%!5($..39G!8%78%9%6*2*+,%9!*.!
*$%!5%62*%!26<!*$%!9*26<+6;!(./+**%%9!9$233!?%!?4!9%(8%*!?233.*!26<!/24!?%!$%3<!?4!
%3%(*8.6+(!,.*+6;=!#$%!12()3*4!.0!264!6%:34!(8%2*%<!5($..3!9$233!,.*%!0.8!+6*%8+/!
8%78%9%6*2*+,%9!*.!*$%!5%62*%!26<!9*26<+6;!(./+**%%9!*.!9%8,%!)6*+3!*$%!6%'*!8%;)328!
%3%(*+.6=!

[= **)%-#1/''!%""+$M1''!+1+-/0(."**L!&3%(*+.69!.0!h00+(%89@!5%62*.89!2*!328;%@!26<!
($2+89!.0!9*26<+6;!(./+**%%9@!26<!264!.*$%8!%3%(*+.69!?4!*$%!12()3*4!B99%/?34!9$233!?%!
(.6<)(*%<!%3%(*8.6+(2334!:+*$!9%(8%*!?233.*9@!:+*$!%,%84!12()3*4!/%/?%8!$2,+6;!.6%!,.*%=!
#$%!(26<+<2*%!:+*$!*$%!$+;$%9*!6)/?%8!.0!,.*%9!9$233!?%!%3%(*%<=!

\= **+1+-/0(."!()!"+.%/(&"!%/!1%&O+**L!>6!*$%!(29%!.0!%3%(*+.69!?4!*$%!12()3*4!
B99%/?34!0.8!5%62*.89!2*!328;%@!%2($!12()3*4!/%/?%8!9$233!,.*%!0.8!2!6)/?%8!.0!
(26<+<2*%9!6.*!*.!%'(%%<!*$%!6)/?%8!.0!9%2*9!*.!?%!0+33%<=!#$%!(26<+<2*%9!:+*$!*$%!$+;$%9*!
6)/?%8!.0!,.*%9!9$233!?%!%3%(*%<!:+*$!.6%!%'(%7*+.6I!:$%8%!*$+9!:.)3<!8%9)3*!+6!)6*%6)8%<!
12()3*4!(.69*+*)*+6;!3%99!*$26!"Kg!.0!*$%!*.*23!/%/?%89$+7!.0!*$%!5%62*%@!*$%!)6*%6)8%<!
2*S328;%!(26<+<2*%!.8!(26<+<2*%9!:+*$!*$%!$+;$%9*!6)/?%8!.0!,.*%9!:+33!?%!9%3%(*%<!)6*+3!
"K!g!.0!*$%!5%62*%!+9!)6*%6)8%<=!!

c= **+1+-/0(."!M''!/Q+!"+.%/+**L!&3%(*+.69!.0!2*S328;%!/%/?%89!.0!*$%!&'%()*+,%!
-./+**%%@!($2+89!26<!/%/?%89!.0!*29V!0.8(%9@!,+(%!($2+89!.0!9*26<+6;!(./+**%%9@!26<!
264!.*$%!%3%(*+.69!?4!*$%!5%62*%!9$233!?%!(.6<)(*%<!%<!2((.8<+6;!*.!78.(%<)8%9!*$2*!*$%!
5%62*%!9$233!78.,+<%!+6!+*9!.:6!+6*%8623!8)3%9=!

O= **/0+!M&+%P0.O**L!>6!*$%!%,%6*!.0!2!*+%@!*$%8%!:+33!?%!2!8)6S.00!%3%(*+.6!6.!32*%8!*$26!.6%!

P= **) (& $! ( ) ! * & (* (" % 1** L! h 6 (%! 2! 78 . 7 . 923! * . ! 2 / %6 <! $29! ? %% 6! 78 . 7%834! + 6 + * + 2 * %< !) 6 <%8! 9%(*+ . 6! " ! . 0! * $ + 9! B8 * + (3%@! * $%! & ' %( ) * + , %! - . / / + ** %% ! 9$233! %69) 8%! * $2 * ! * $%! 78 . 7 . 923! + 9! 78%(+9%34! : . 8 <%<! 26 <! + 6 (3) <%9! 233! / . <+0+(2*+ . 69! . 0! * $ + 9! - . 69*+*) *+ . 6! 6%(%99284! * . ! V%%7! + *! 2! (. 69+9*%6*! <. ( ) / %6*=!

J= **&% / 0) 0 - % / 0 (. ! M ' ! " + . % / +** L! B0*%8! 9%(*+ . 69! " ! 26 <! P! . 0! * $ + 9! B8 * + (3%! $2 , %! ? %% 6! 92*+90+%<@! * $%! & ' %( ) * + , %! - . / / + ** %% ! 9$233! <+9*8+?) *%! * $%! 78 . 7 . 9%<! 2 / %6< / %6*! * . ! * $%! / % / ?%89! . 0! * $%! 5%62*%! 2*! 3%29*! . 6%! B (2<% / + (! e %%V! + 6! 2<, 26(%! . 0! * $%! / %%*+6 ; ! 2*! : $+($! + *! : + 33! ? %! (. 69+<%8%<=! F2*+0+(2*+ . 6! . 0! * $%! 78 . 7 . 9%<! 2 / %6< / %6*! ? 4! * $%! 5%62*%! 9$233! 8%Q) + 8%! 26! 200+8 / 2*+ , %! , . *%! . 0! * : . S * $ + 8<9! . 0! * $%! / % / ?%89! . 0! * $%! 5%62*%=!

X= **&% / 0) 0 - % / 0 (. ! M ' !) % - # 1 / ' ! %" " + $ M 1 '** L!! > 0! 82*+0+%<! ? 4! * $%! 5%62*%@! * $%! 78 . 7 . 9%<! 2 / %6< / %6*! 9$233! * $%6! ? %! 9) ? / + ** %<! * . ! * $%! 12 ( ) 3*4! B99% / ? 34! 0 . 8! 26! %3%(*8 . 6+(!, . *%=! # $%! & ' %( ) * + , %! - . / / + ** %% ! 9$233! <+9*8+?) *%! * $%! 78 . 7 . 923! %3%(*8 . 6+(2334! * . ! * $%! 12 ( ) 3*4! B99% / ? 34! 2*! 3%29*! . 6%! B (2<% / + (! e %%V! + 6! 2<, 26(%! . 0! * $%!, . *%=! # $%! 2 / %6< / %6*! 9$233! ? %(. / %! %00%(*+ , %! : $%6! 82*+0+%<! ? 4! 26! 200+8 / 2*+ , %! , . *%! . 0! * : . S * $ + 8<9! . 0! * $%! 12 ( ) 3*4! B99% / ? 34! , . *%=!!

#

2%!,#31",$!$4$!1"#+,#*516$&5#'(#$%&#7*/4)$(#8,,&-')(#1"#91:&-'&0#;<=#><<?#*"5#$11@#&AA&/$#1"#B*0/%#;=#><<CD#E$#+*,#*-&"5&5#1"#F/$1'&0#;G=#><;;#*"5#B*(#?=#><><D!*