



!
!
!
!
!
!

! "#\$%&'()*+ '\$, '-.&(#/*0-\$1.23- "(14* 5 3-6#7\$)' .*

8(%&*93" #\$. (31*\$1, * : 1, '-.%\$1, (14*

!
!
!

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

/0*1! ! . 02(##(, !- . !

34+(!56!3(78\$*%' ,!- . !

!

-*+. '/01+2' *!

/*\$!+94##+!(%&!4 : ; *%1(7!47!(# : *+!&<&%=!>*? ,!(+!l@&=!@&# ; !=*A!47!&\$&0!4<&#=#!

0* : : A740(1478!B4!@!0*B *%9&%+,!0#4&7!+,!(7 ' !*1@&%!4 : ; *%1(7! ; &* ; #&!(!B *%9,! : (9478!\$*%!(!

@(; ; 4&%!(7 ' ! : *%&! ; %* ' A0!4<&!B *%9 ; # (0&6! / *\$!+94##+, ! ; %* < &7!0%A04(#!47!@&(#!@0(%&! (%&!(#+*!

;(% (: *A7!47!l@&!?A+47&+!&7<4%*7 : &7!CD(19(,IEFGHI6! " : *78!l@&+&!& : ; (l@=!4+!0*7+ ; 40A*A+!

(7 ' !0#*+&#=#!479& ' !1*!&1@40(#!(7 ' !+&%<(7!#&(' &%+@4 ; !(7 ' !&<&7!84<&+!%4+&!1*!(!7&B! : * ' &# ,!l@&!

& : ; (l@&140!#&(' &%+@4 ; !

!

\!

& : ; (1@=!&7(?#&!47'4<4'A(#+!1*!; %* <4' &!8&7A47&!0(%&! (7' !+A; ; *%1, !; *1&714(##=!#&('478!1*!1@&!
' &<&#* ; : &71!*\$! : &(7478\$A#!%&#(14*7+@4; +!C [A%8&+!&1!(#6,!EFE\I6!W@&+&!%&+&(%0@&+!%&<&(#&'!1@(1!
?=!471&8%(1478!(##!1@&!0@(%01&%4+140+!(++*04(1&'!B41@!& : ; (1@=,!47'4<4'A(#+!0(7!0A#14<(1&! (7!* ; &7]
: 47' &'!(; ; %*(0@,!%&\$%(47!

!

R!

P+=0@*#*840(!+(\$&1=!

B@4#&!\$*+1&%478!1%A+!!(7'!0A#14<(1478!& : *14*7(#!?*7'+!B41@!& : ;#*=&&+!C - A,!EFGJI6!W@&+&!
 ;%*0&'A%&+!&+1(?#4+@!; +=0@*##*840(##=!+&0A%&!+&11478+!1@(!!;%* : *1&!& : ;#*=&&!%&1&714*7!?!\$A##=
 470#A'478!47'4<4'A(#+!47!('(;1478!bA409#=#!*!0@(78&+!(7'!&\$&\$014<&#=#!7(<48(1478!A70&%1(471=#!*!
 (00* : ;#4+@!0*% ;%*(1&!*?>&014<&+6!M70#A+4<&!B*%9!&7<4%*7 : &71+!(%&!0@(%(01&%4N&'!?!& : ;(1@=(7'!
 ; +=0@*##*840(#!+(\$&1=,!(!1@&=#!\$*+1&%!@A : (7!%&#(14*7+@4; +(7'! ; *+414<&#=#!47\$A&70&10* : : A740(14*76!
 M7'4<4'A(#+!@(<&!(1+&7+&!*\$!+&0A%41=#!B@&7!1@&=#!0(7!\$%&&#=#!&Q ; %&+!1@&4%1!A&!+&#<&+ ,!+@(%&!1@&4%!
 1@*A8@1+!(7'! ; 474*7+ ,!(7'!1(9&!?*#'(014*7+!B41@*A1!B*%%=478!(?*A1!7&8(14<&!0*7+&bA&70&+!
 C . 02<##(,!EFG`K! . 02<##(!&1!(#6,!EFE\I6!

'' ;&!A'%&!'(189 : #+ ; <!#* /!> , <1 ; '% 621#?!?#(&+<!2*!B&# / & . , ; 2 : !

U : ;(1@=#+!(!0(1(##=+!?!?&1B&&7!&Q0&##&71!(7'! : &'4*0%&!#&('&%+!'A&!1*!& : *14*7(#!\$(01*%+!
 %(1@&%!1@!(7!(0('& : 40!(0A : &7!(7'!@(+!?!?&&7!0#*+&#=#!(++*04(1&'!B41@!&1@40(#!(7'!+&%<(71!#&('&%+@4 ;!
 C "\$+&(!^! / @(>&@ (7,!EFGHK!3#=(+!&1!(#6,!EFEFK! . (#L7!&1!(#6,!EFEFK!P&78!^!347,!EFGcI6! a &8(14<&!
 #&('&%+@4 ; !@(?41+!(7'!1%(41+!0(7!?!?&0* : &!478%(47&'!47!(7!%*8(74N(14*7,! ; A11478!1**! : A0@! ; %&+A%&!
 7!41!(7'!0@(78478!41+!+1(1&!<&%!14 : &!C) (7' *#S4!^! / 1*7& ,!EFEEI6!D&8*!&1!(#6!CEFGcI!*?+&%<&'!1@(!!
 &1@40(#!(7'!(A1@&7140!#&('&%+!'& : *7+1%(1&!B@(!1!@&=#!('<*0(1&!47!1@&4%!B*%' +!(7'!(014*7+6!

M7!0*71%(+1,!& : ;(1@=#!\$*+1&%+!(! : *%&!470#A+4<&!(7'!+A ; ; *%14<&!B*%9!&7<4%*7 : &716! _ @&7!
 & : ; #*=&&+!\$&&#!A7' &%+1**'!(7'!<(#A&' ,!41!0*71%4?A1&+!*(! ; *+414<&!(1 : *+ ; @&%&!B@&%&! ; &* ; #&!(%&!
 : *%&!#49&#=#

47414(14<&+!+;&04\$40(##=!0%&(1&'!1*!(++4+1!& : ;#*=&&+!47! : (7(8478!;&%+*7(#!(7'!; %*\$&+4*7(#!
0@(#&78&+!1@(1!0*A#!!4 : ; (0!1!&4%!>*?!; %* ' A014<4! =, !; @+=40(#!@&(#!@,!(7'!*<&%(##!B&#\$(%&6!W@&!8*(#!
*\$!& : ; (1@&140!#&(' &%+! : 48@!?!&1!0*7+4 &%!; *#404&+(7'!; %*0&'A%&+!1@(?!?&7&\$4!(##!& : ; #*=&&+!
470#A '478!1@*+&!B41@!1%(A : (,!?A4# '478!(!B*%9; # (0&!B@&%&! (##!0(7!1@%4<&!(7'!0*71%4?A1&1!1@&!
*%8(74N(14*7!+!*<&%(##!&\$&014<&7&+6!)

8 9 : #+ ; &+21!B&# / & . , ; 2 : !#* / ! 8 9 : % ' < & ! 8 * 6 # 6 & 9 & * + !

_ @&7!& : ; #*=&&+!\$&&#!A7' &%+1**'!(7'!<(A&' ,!4!0*71%4?A1&+!1*!(!; *+414<&!(1 : *+ ; @&%&!
B@&%&!; &* ; #&! (%&! : *%&!#49&#=#!1*!&7>*=!0* : 478!1*!B*%96!W@4+!0(7!%&'A0&!+1%&+!+(7'!470%&(+&!+&#)\$
&\$40(0=!B@4#&!4 : ; %* < 478! ; &%\$*% : (70&!CW(<(9*#4, !EFGFK! [@ ('A4, !EFGJI6!U : ; (1@&140!#&(' &%+@4 ;!
(7'! ; *+414<&!0*B*%9&%!%#(14*7+@4 ; +!470%&(+&!& : ; #*=&&+!(14+\$ (014*7!(7'!&78(8& : &7!?!&0(A+&!
& : ; #*=&&+!B@*! ; &%0&4<&!1@&4% : (7(8&%+(7'!0*##&(8A&+!(+!& : ; (1@&140!(%&! : *%&!#49&#=#!1*!?!&!
+(14+\$4&'!B41@!1@&4%!>*?+,

!

H!

47 '4<4' A(#+!47!' &<&#*;478!

!

J!

?&+1

A7' &%=478! ?4(+&+6!W@&&\$*%&,!#&(' &%+! : A+!!(097*B#&' 8&!1@&4%!*B7!1@%*A8@!+&#&]%%&\$#&014*7!(7'!

&70*A%(8&!1&(: ! : & : ?&%+!1*!&Q;#*%&!1@&4%A7' &%=478! ?4(+&+,!(<*4'!(++A : ;14*7+,!%&\$%(47!\$%* : !

: (9478!@(+1=!>A' 8 : &71+!(?*A1!(!+4!A(14*7!*%!47'4<4'A(#,! (7'!(; ;%*(0@!?*1@!B4!@!& : ; (1@=6!!

3&(' &%+!+@*A#' !0%&(1&!470#A+4<&,!(+\$&!&7<4%*7 : &71+!B@&&!47'4<4'A(#+!\$&&#!49&!1@&=!

?&#*78!+*!1@&=!0(7!8%*B!(7' !#&(%7!C . 02(##(!&!(!#6,!EFE\I6!S7&!&\$&014<&! : &1@*!'!\$*%!#&(' &%+!1*!

A+&147!1@&4%!bA&+1!1*! : 4148(1&!1@&4%! ;&%+*7(#!?4(+&+!4+!+&#&]%%&\$#&014*76! / &#&]%%&\$#&014*7!0* : ;&#+!

47'4<4'A(#+!1*!0*7+4' &%!1@&4%!(014*7+!\$%* : !(<(#A&+! ;&%+ ;&014<&! ?&\$*%&!%&+ ; *7'478!C) ** '+,!EFEEI6!

M!4+!(!0*7147AA : !'4+04 ; #47&'!(7' !%48%*A+!\$*% : !*\$!1@479478!1@(1!%&bA4%&+!47'4<4'A(#+!1*! ?&!1%A&!1*!

1@& : +&#<&+!(7' !?&!B4##478!1*!(' %&+!1@&4%!B&(97&+&+&+!(7' !<(#A&!0*7+1%(471+!%*!0*71&714*7+!

1@%*A8@!0%4140(##=!&Q(: 47478!1@&4%!1@*A8@1+,!(014*7+,!?'&\$+,!(7' !<(#A&!+=+1& : +6! _ @&7!\$(0&'!B4!@!

(!0*7\$40!1@(!!0@(#&&78&+!1@&4%!<(#A&+!+=+1& : +,!1@&=! : A+!!(++&+!1@&4%!<(#A&+!B@4#&!0* : ; (%478!

1@&4%!<4&B+!1*!* ; ; *+478!<4&B ; *471+,! ; A%8&!470*7+4+1&704&+,!(7' ! : (9&!1@&!%48@!1' &04+4*7!B@&7!

B(%% (71&'!C) ** '+,!EFEEI6!3&(' &%+!B@*!+&#&]

\$#&Q4?#&!B*%9!+0@&'A#&+,! : (1&%74l=(7'! ; (1&%74l=#&(<&!\$*%!?4%1@+(7'!('* ; 14*7+,!(7'!*1@&%!
& : ; #*=&&]0&71%40! ; %*8% (: +6!TA%1@&% ,!#&(' &%+!+@*A# ' !&70*A%(8&!0%&(1478!& : ; #*=&&!%&+*A%0&!
8%*A ; +!CUD) +I!+*!B*%9&%+!B4l@!+4 : 4#(%!?(098%*A7 '+!*%!@*? ?4&+!0(7! : &&1,+@(%&!&Q ; &%4&70&+,!(7'!
@&# ; !&(0@!*1@&%6!!
UD) +!@(<&!?&&7!\$*A7 '!!*!4 : ; %*<&!A7 ' &%+1(7'478,! ?&#*78478,!(##=+@4 ; ,!(7'!& : ; (1@=
B4l@47!*%8(74N(14*7+!C) %&&7,!EFGHI6!S%8(74N(14*7+!B4l@!UD) +!*\$1&7!&70*A%(8&!%*8(74N(14*7(#!
0* : : A74l=! ?=(##*B478!(7' !&70*A%(8478!8%*A ; +!1*\$*% : !\$*%!(' ' !& : ; #*=&&!+A ; ; %*1K!1@&+&!
8%*A ; +!(%&!*\$1&7!\$*% : &'! ?=!& : ; #*=&&!0@(%(01&%4+140+!+A0@!(+!+&QA(#!*%4&71(14*7,!% (0& ,!*%! : A1A(#!
47l&%&+!1!8%*A ; +6!W@&+&!8%*A ; +! : (=!8*! ?&=*7' !*%8(74N(14*7(#!+A ; ; %*1! : &&1478+!(7'! ?&0* : &! (014<&!
47!*A1+4 ' &!&<&7l+!1*\$A%1@&%! ; %* ; (8(1&!& : ; (1@=(7'! ?&#*78478,!B4l@! ; %*8% (: +!+A0@!(+!
A7 ' &% ; %4<4#&8& ' !+0@**#!<#A7l&&!B*%9,!\$*% ' ?(79!B*%9,!*%!*1@&%!1= ; &+!*\$!+*04(#!

A&(&.*1&,!

" ?%(: +*7,! " 6!CEFEG,! a *<& : ?&%i - &0& : ?&%I6!2A#14<(1478!& : ; (1@=6! ; I")'I%+I "'+H&B7216I*BI+

JKCHI,!RRj`E6!

" \$+(%,! [6,! ^ ! / @ (@ > & @ (7 , ! " 6 ! C E F G H I 6 ! 3 4 7 9 4 7 8 ! & 1 @ 4 0 (# ! # & (' & % + @ 4 ; ! (7 ' ! : * % (# ! < * 4 0 & k ! W @ & ! & \$ \$ & 0 1 + ! * \$!

: *% (#!&\$40(0=,!1%A+1!47!#&(' &%,!(7' !#&(' &%)\$*##*B&%!<(#A&!0*78%A&70&6! : \$(# \$ % & 2) 5 + (" # +

L%*(")M(')I "'+N\$O\$6I5 . \$"' : 0I - % "(6I:P>,!cc`]cJ\6!@11 ; +kii ' *46*%8iGF6GGFHi3S - f]FG]EFGH]

FFG`!!

" %8@* ' & , ! Y 6 , ! 3 (1 @ (7 , ! " 6 , !

2(#'B&##,!26,!M0@4@*,!D6,!^!"7'&%+*7,!Y6!CEFGcI6!O7'&%+1(7'478!#&<&#!`!#&('&%+k!W@&!&1@40(#!
 ;&%+;&014<&+!*\$!#&('&%+@4;!@A:4#41=6!OI-%"(6+I0+; ("(*\$. \$"'N\$0\$6I5. \$"'!P9C`I,!cERj
 c\E6!@11;+kii '*46*%8iGF6GGFHi>: 'JFJJEFGdJFGHR!!

2*#8(7,!T6!^! . 09&(%7&=,! "6!CEFGEI6!Y4+4?4#41=(7'!<*40&!47!*%8(74+(14*7+k!3&+?4(7,!8(=,!?4+&QA(#!
 (7'!1%(7+8&7'&%!&: ;#*=&!7&1B*%9+6! =U-(6)'B+N)0\$%&)'B+("#+F"76-&I"V+W"+F"\$%(")I"(6+
 OI-%"(6I+PDCRI,!`J]\cH6!@11;+kii '*46*%8iGF6GGFHiFEdGFG`GEGGEE\FRJ!

-A,! -6!CEFGJI6!U: ;(1@&140!#&('&%+@4;!j!5 &=#&#& : &7!\$*%!47+;4%478!+1%(1&840!: (7(8& : &7!!(7'!(!
 <4+4*7(%=!&\$&014<&!0*% ;*(1&!8*<&%7(70&6!OI-%"(6+I0+=. \$%*)"*+, %\$"#&+)" ; (%4\$)"*+("#+
 ; ("(*\$. \$"'!DCGI,!EHFjEJE6!!

U9#A7',!f6,!^! . &%(74A+,! . 6!CEFEGI6!W*B(%'!(!0*7+&7+A+!*7!l@&!7(1A%&!*\$!&: ;(1@=k!"!%&<4&B!*\$!
 %&<4&B+6!H(')\$"+=#-7(')I"+("#+TI-"&\$6)"*;!DERCEI,! \FFj

)**'+,! "6!CEFEI6!TA1A%&!#&(' &%+X!&1@40(!?&@(<4*%'&<&#* ; : &7!A+478! [*%40A(!2*##&8&X+!

(\$&014<&! '&<&#* ; : &7! : *' !F"\$%"(')I"(6+OI -%"(6+IQ+A\$&5I"&)Z6\$+: \$(#%&2)5+("#+

= '2)7(6+N\$7)&)I"0 ; (4)"* ,!RCGI,!GjG`6!@11 ; +kii '*46*%8iGF6RFGHi4>#&' : 6\G`dGJ!!

)%&&7,! _ 6! . 6!CEFGHI6!U : ; #*=&&!%&+*A%0&!8%*A ; +!(+!#&(%7478!0* : : A7414&+6! =U - (6)'BI+N)O\$%&)'B+

("#+F"76- &)I"V+W"+F"\$%"(')I"(6+OI -%"(6,!PXCcI,!d\Rj dRH6!@11 ; +kii '*46*%8iGF6GGFHi&'4]GG]

EFGd]FFH`!!

)%&&7#&(\$,!D6!CGJccI6!/\$%0("'+6\$(#%&2)5V+W+OI -%"\$B+)"'I+'2\$+"('-%\$+IQ+6\$*)'. ('\$+5I [\$%+("#+

*%\$("'\$&&8!P(A#4+!P%&+6!!

M78% (: ,!S6!26!CEFGdI6! / &%<(7!#&(' &%+@4 ; !+(!#&(' &%+@4 ; ! : *' !6!OI -%"(6+IQ+ ; ("(*\$. \$"'+

/7)\$"7\$+("#+C- &)"\$&&F"\$%66)*\$"7\$,!DCGI,!EGjEd6!!

f4(78,!Z6,!^!3*A,!16!CEFGHI6!2%(\$1478!& : ; #*=&&!%A+!k!T%* : !(A1@&71404! =,!1% (7+ ; (%&70=!1*!

&78(8& : &7!6!OI -%"(6+IQ+TI . . - ")7(')I"+ ; ("(*\$. \$"'I+KKCEI,!G\H]GdF6!

@11 ; +kii '*46*%8iGF6GGFHiF2S .]Fc]EFGd]FF` `!

5*09,!a6,! . (= \$4&#',! . 6,! . (= \$4&#',!f6,! / &Q1*7,! / 6,! ^! - &!3(!) (%N(,!36! . 6!CEFGHI6!U : ; (1@&140!

#&(' &%+@4 ; k!Z*B!#&(' &%!& : *14*7(#!+A ; ; *%!(7'!A7' &%+1(7'478!47\$#A&70&+!\$*##*B&!

; &%\$*% : (70&6!OI -%"(6+IQ+ : \$(#%&2)5+Y (. 5\+L%*(")M(')I"(6+/'-#)\$& ,!K9CEI,!EGcjE\d6!

@11 ; +kii '*46*%8iGF6GGccIG`RHF`GHGHHFdEJF!!

3(78\$*% ',!36,!f*7&+,!

!

GH!

. 02(##(!/6,!3(78\$*%'!36,!^!)**'+,

D*+,!26!CEFERI6!, %(" &7\$"#)"*+%(- . (V+W+6\$(#\$_&+4\$B&+'I+\$. 5I [\$%)''*+\$. 56IB\$\$&6!P+=0@*#*8=!

W*' (=6!@11;+kiBBBB6; +=0@*#*8=1*' (=60* : iA+i?#*8i%&(#]@&(#478iEFERFRi%(7+0&7'478]

1%(A : (])#&('&%+]9&=+]l*]& : ;*B&%478]& : ;#*=&&+!!

/@(%4\$4%(' ,!-6!/6!CEFG\I6

26!CEFERI6! . &(A%&+!*\$!& : ; (1@=(7 '!0* : ; (+4*7k! " !+0*;478!%&<4&B6!H: L/+

Lb=,!D>CGI,!&FEJcFJJ6!@11;+kii '*46*%8iGF6G\cGi>*A%7(#6;*7&6FEJcFJJ!