

!"#\$%&'()*!+&\$*%, -* . #/'0#&\$*1234+"%'&+ , /

!"#\$"%&' (##\$")&*%+\$%, &(-& . (+/,0(1,&2("3%"%4&567

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X!"-<' .#7!Q:!U3L/(8!d3\$\$2>%!^2-4\$(%-.7!@a/9\$(!V2.\$(2/-'2/0!T.397!;\$2.(\$A!

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.#7!/0%'!%364\$(!\$0-.-%!.329\$%/29-25%'!+,30.3(\$8!/(/.8!*'\$.(7!/29!'!*\$(-*#\$(-,!%*/,\$%!/29!%368\$,,%!
/%!#\$0*0\$%%!4-,.-<%!/29D'(!9/25\$('3%!'+\$29\$(!32&'(.#7!'!/\$2.-'2:!V2!'!.\$(!&'(9%8!.\$7!
6\$, '<\$!/5\$2.%!'!+6'!.#e(\$%-%/2,\$f!@.'!%-0\$2,\$8!'60-.\$(/.-'28!/298!-<*'('./2.078!4-,.-<-L/.-'2A!/29!
e\$E-%.\$2,\$f!@/%!*'-0-./0!%368\$,,%!&#'%\$!&'(9%!/29!/...39\$!/-<!.!'/&/)2-25!.\$!/39-\$2,\$!..!
(\$+0\$,-'28!/&/(2\$2%%!/29!.\$!2\$9!+'(!%' ,-/0! ,#/25\$A!

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m!T/<% '2!M)' .#M* '29'8!O/%%(/(!; '00\$5\$! I! ` -, #/\$0!Q:IT#/\*-('8!^2-4\$(-.7!'!+!U/&/-n-!/./! ` o2' /!

M3(!/2/07%-%!6\$5-2%!&-.#!i#-0-*!R:!!H-,)!D!N-90\$7!T,'..!.\$E.%!?!.\$!2'4\$0!O '*123''&3)*O''#% . *,*
45#6''&\$*78##9!/29!+0<!a0/9\$*: (22#''-2!&#-,#!.##!/29('9D(\$*0-,/2.1*('93,-25!"7(\$00!; '(* ' (/.-'2!
' * \$(/.-25!329\$(!.##!6/22\$(!e ` ' (\$!U3</2!"#/#2!U3</2f!3%%\$!\$<*/.#7!/%!/!</()\$(!'+!.\$!
9-+\$(2,\$!6\$.&\$2!#3</2!6\$-25%!/29!.\$!(\$*0-,/2.%!-!.\$E.(/ ,.%!4/03\$!+(' <!&#-0\$!0-<.-25!.\$-(!0+-\$!
%*/2%:! I -.#!.##!4/5/(-\$%!'+!\$<*/.#7!/%!(\$+\$(2.8!&\$!.3(2!2\$E.!. ' !R\$2!K-3>%!%# ' (.!%.' (7!; 8#*<%''#6%="#''!
@/**\$/(-25!-2!S\$-0!; 0/())\$%!e ` ' (\$!U3</2!"#/#2!U3</2f!/2.#'0'57A!&#\$(!.\$!+!/<-07!'!+!.\$!6\$91
(-99\$2!*(' ./5'2-%.!=<*0'7%>!/!![bD_!('6' .!,/(\$./)\$!+(' <!T32%#-2\$!U' <\$,/(\$!T'03.-'2%!!1!&# ' !e-%!
2\$4\$(!'+193.7!f!1! '207!.'!9-%, '4\$(!.#/!.!.\$!('6' .!-%! '*\$(/.\$9!(\$<' . \$07!67!/! <-5(/2.!0/6'(\$!
%. (3550-25!&-.#!/!*(\$,/(-'3%!0+-\$! I \$!, '2,039\$! '3(!/2/07%-%!'+!# '&!\$<*/.#7!&'()%. ' !4/03\$!/29!
' (9\$(!#3</2!#3</2! /29!#3</2!2'21#3</2! (\$0/.-'2%! &-.#! /! (\$/9-25! '+! G29(\$7!Q32)'4%)7>%!
N3%%-/2!%, -\$2,\$!+-,.-'2!%\$(-\$%!>#66#''*68%2*?)@*

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b!Q30-'!; p%/(!Hj/L!; /09\$(k28!^2-4\$(-.7!'!+]0'(-9/! I !q/+ ' !F(-,)!M6/29'!G(\$2/%8!O-%3/0!G(-%!
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\!T#(\$\$!H\$%#*/29\$8!^2-4\$(%-.7!'!+!U/&/-n-!/.!`o2' /!

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V!/2/07L\$!;VG!9',3<\$2.%! '2!/5\$2,7!/29!-2%3(5\$2.!(,\$,(3-.<\$2.!/%!&\$00!/%! '2!32\$<*0'7<\$2.!/29!
9-%\$2+(/2, #--%\$<\$2.!*360-%#\$9!/('329!.\$#!*/%#/5\$!'!+!.\$#!N\$#/6-0-./.-'2!G, .!'!+!Xh_m!/0'25!&-.#!
.\$E.%! '2!4', /.-'2%!/29!*('+\$%-%'2/0-L/.-'2!.!6(-25!-2.'!(\$0-\$+!/!* '\$.-,%!'!+!.\$#!U3</2!&#-,#!</7!
%*\$ /)!.'!.\$#!%368\$,.-4-L/.-'2!'!+!*(\$,/(-7!/29!.\$#!5\$' *'0-.-,%!'!+!*(\$,/(-7!-2!-2.\$(2/.-'2/0!(\$0/.-'2%:
V!3.-0-L\$!.\$#!* '-\$%\$%! ' +!T704-/! I 72.\$(>!=*-\$L/!+(/<\$&')>!@ I 72.\$(8!Xhh[A!/29!`-,#\$0!9\$!;\$(\$. /3>%!
+'(<30/.-'2%! ' +! =3%\$! /29! =, '2%3<*.-'2>! @XhYbA! .'! *03<6! #'&! 9-++\$(\$2.! %368\$,.-4-.\$%! /(\$!
/%%\$<60\$9! /29! , '2%-.3.\$9! -2! '(9\$(!.'! \$E.\$29! /29! 9\$0-<-.! .#\$! \$*-%.\$<\$! -2/353(/.\$9! 67! .#\$!
./2%/./0/2.-,! %0/4\$!./9\$!V2!' .#\$(!&' (9%8!V!/.<*.!.!'!9\$+ /<-0/(-L\$!.\$!=U3</2>-2!-2.\$(2/.-'2/0!
(\$0/.-'2%D.#-%!6(/29!'!+!U3</2!N\$%'3(,\$%>67!.\$29-25!.'!-.%!5\$2\$%-%/29!.\$#!<'6-0-L/.-'2!'!+!-.%!
, '<*'2\$2.1*/(.%!&-.#! /2!\$7\$!.'!(\$,(3-.<\$2.8!&-00+302\$%9%8! /29!\$E*(\$%- '2:!V!/0%'!%\$\$)!.'!\$2(-,#!
9-%,3%-%'2%! ' +!*(\$,/(-7!(' '\$9!-2!0/298!0/6' (8! /29!<-5(/.-'2!67!+'00'&-25!&#/.!, '25\$/0%! '3!' +!
.\$\$-(!9\$.\$((- '(-/0-L/.-'2:!] -2/0078!&#-0\$!V!.\$/.!&'30916\$!-2%3(5\$2.%.!'!6\$!/2!\$E/<*0\$!'!+!*(\$,/(-'3%!
%368\$,.%!/.!0\$/%!.!-2!.#-%!-2%./2,\$8!V!9'!2' .!./)\$!+' (!5(/2.\$9!.\$#!</27!0-2\$%!#/.!, '<*0-, /.\$!%368\$, .1
+'(</.-'2r!'2!.\$#!, '2.(/78!.#-%!-2.\$(*0/7!-%!&#/.!/2-</.\$%!.\$#!&'):!

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5 +"6/0+3*:)*8"&-%(9*> * ? %"\$0*

;#/-(%J!N-.3!O-B!P!H-%,3%%/2.J!

(\$,/(-.7!+'(!%'<\$!-2!.\$#!+/,,\$!'+'!\$(</2\$2.!*\$,/(-.7!+'(!'.'#\$(%:! "#\$%\$! .#-2)\$(%! *3%#! /%-9\$!

9\$#3</2-L/.'-2!'+'!.\$\$, '0'2-/0!4-'0\$2,\$!'+!9-%*'%%\$%- '2!/29!.\$\$!2\$'0-6\$(/0!/6/29'2<\$2.'+'!
#3</2!9-52-.7!-2!'(9\$(!. '\$24-%- '2!,\$/.-25!2\$&!(0/.- '2%#-*%!'+'9\$, '0'2-/0!,/(0!/29!/,, '32./6-0-.7:!

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b!q\$72\$*!Wt0u/#!v/*/28!^2-4\$(%-w.!F(+3(!

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U-%.'(-,/0!VN!#/!/!/*(' /, #9!#-%.'(7!-2!/!*\$9'<-2/2.07!32,(-.-,/0!</22\$(!/!/!(\$*'%-.'(7!'+'!(3.#!
/29!-.!#/! 6\$\$2! *(\$%\$2.\$9! /%! /2! /99-.4\$! <'9\$0! &#\$(67! . ''#* #-%.'(78! . ''#* +/, %! /29! . ''#*
\$(%\$,-.4\$%!2,039\$9!&-.#-2!.\$!%.'(7!'+'!.\$!-2.\$(2/.- '2/0!&-00!(\$<\$97!.\$!%#'(., '<-25%!9\$2.-+\$9:!
"#\$! /(-,0\$! /(53\$%! .#/!.! .#\$! %33&6&B#* /**(' /,#! #!/! 6\$\$2! .#\$! (\$30.! '+' /**(' /, #-25! #-%.'(7!
32*('60\$</.-,/007!/29!+(/<-25!.\$!-%%3\$!'+!F3(',\$2.(-%<!.#('35#/2!/6%\$2,\$!'+!#-%.'(78!+/,.%!/29!
\$(%\$,-.4\$%:!"#\$! /(-,0\$!&-00!+',3%! '2! '2\$!%*\$,-+.,!/%*\$,..!'+!*('60\$</.-L-25!#-%.'(7!/29!/%)!2' .!
C8%6*%)*8&)6'''D*63.!(/.#\$(!

(\$,/(-.7!-2!2' 4\$0%/29! '\$<%!&(-..\$2!6\$.&\$2!XhXY!/29!.\$#!*(\$%\$2.:!T' <\$!/(!&(-..\$2!/!.!9-+\$((\$2.! .-<\$%! .#/2! .#%!\$4\$2.%! ,/3%-25! .#%! *(\$,/(-.7! 63.!9\$*-,.! .#%!4302\$(/6-0-.7!/29!(\$%-0-\$2,\$! ' +! .#%-(! ,#/(/ ,.\$(%!-2!&/7%! .#/!.!32-4\$(%/0-L\$! .#%-(!%.(3550\$!M.#\$(%! ' +\$(! .#(' 35#! .#%-(! ,\$(/-.4-.7!+-(% .#/29! / , , '32.%!67! .# ' %!&# ' !#/4\$/29! , ' 2.-23\$! . ' !E*\$(-\$2,\$!*(\$,/(-.7!T36B\$, .%/99(\$%%\$9!-2,039\$!.\$#! XhXY! -2+03\$2L/! * /29\$<-,8! .#%! 6' <6-25! ' +! ` /0./! 93(-25! I ' (09! I /(! W8! (\$*\$(-,3%%-' 2%! ' +! 50'6/0-L/.-' 28! 23,0\$/(! .#%.-250! /29! ,0-</.\$! ,#/25\$! -2! M,\$/2-/8! /29! ;MOVH1Xh! &' (09&-9\$! d3\$%.-' 2%!E/ <-2\$9! .#(' 35#! .#-%!(\$*(\$%\$2./.-4\$!%/ <*0\$!/(!\$!# ' &!9' !-</5\$%! ' +!*\$(\$,/(-.7!9\$*- , \$9! -2!0-.\$/(.3(\$!67! .# ' %!&# ' !E*\$(-\$2,\$!/29!&(-.\$!/6' 3.-!93(-25!-%! ' , , 3((\$2,\$!9-+\$(!+(' <! .# ' %! &(-..\$2!67!/3.#' (%!-2!\$2.-(\$07!9-+\$((\$2.-<\$!*\$(-' 9%/6' 3.-!/*(\$,/(-.7! .#7!#/4\$!2' .!E*\$(-\$2,\$9x! G290!&#/.!/(!\$!.\$!./9\$' ++\$!6\$.&\$2! .#5\$(\$/.\$(4%-6-0-.7! ' +!&')%!67!/3.#' (%!&# ' !&(-.\$!/6' 3.-!/*(\$,/(-.7! .#7!9' !2' .!E*\$(-\$2,\$8!/29! .# ' %!&# ' ! ,/2!%*\$/)! ' +!*\$(\$,/(-.7!+(' <!E*\$(-\$2,\$!63.!0/ ,)! .#5!4%-6-0-.7!+ ' (!.#%-(!% . ' (-\$%! . ' !6\$!#\$/ (9x!

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b!F4!/!U-06\$(58*^2-4\$(%-7!' +!T#\$++\$09!

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U' &! ,/2!&\$!</)\$!%\$2\$%! ' +!E*\$(\$%- ' 2%! ' +!*\$(\$,/(-.7!?!-2!* '\$.(78! .#\$/ .(\$8!+- , .-' 2!?!-2!/!&/7! .#/.! / , , '32.%!+ ' (!.#\$!* /(-. ,30/(!C3/0-.\$%! ' +! ,#/00\$25\$!(\$%-25!-2! .#%\$%!+ ' (<%! ' +!/(.x! " #-%!/*/*\$(!%\$%)%!. ' ! 9(/&' 3.-!.\$!* ' 0-.- ,/0!9-<\$2%- ' 2!' +!*\$ \$.- ,!E*\$(\$%- ' 2!' 2! .#5!6/%-%! ' +!W\$ ' (5!at ,#2\$(>%! / 'DF#=\$8!/! +53(\$! .#/.!-2! </27!&/7%! *\$(\$ ' 2+-\$%! *(\$,/(-.7!T./(-25!+(' <! .#5!2' .-' 2!' +!%\$%\$2.-/0! ,#/00\$25\$! , ' 2./-2\$9!-2!/!<-2' (10-.\$/(.3(\$!@+ ' 00' &-25!H\$0\$3L\$!/29!W3/../(-!XhYmA8! .#5!/*/*\$(!5' \$%! ' 2! .!E*\$0' (\$! .#5! , '29.-' 2%! ' +!*\$ %%-6-0-.7!' +!/* ' 0-.- ,/0!/\$% .#5.- ,%! ' +!*\$ \$.(7!/29!* '\$.- ,/0!E*\$(\$%- ' 2!6/%\$9!' 2! .#5! , ' 2,\$* .%! ' +!-2.\$2%-7!/29!9\$.\$((- ' (-/0-L/.-' 2! " #-%!(9/9-25! ' +!/\$% .#5.- ,%!(4\$4/0%! .#5-(!* ' .52.-/0!+ ' (! ,#/00\$25\$8!+ ' (!524-%/5-25!0-+\$! .!6\$! ' .#5(&-%\$!?!63!&#/.!</)\$%! ' 2\$!4\$(\$%- ' 2!' +! .#-%!< ' (\$! , ' <\$00-25! .#/2! ' .#5(%x!a7!E*\$0' (-25!-2.\$2%-7!/%! /!/* /(-. ,30/(!C3/0-.7!' +!/\$% .#5.- ,!E*\$(\$%- ' 28! .#-%!/*/*\$(!.#52! <' 4\$%!6\$7' 29!H\$0\$3L\$!/29!W3/../(>%!*(-</7!+ ' ,3%! ' 2!</B' (!/29!<-2' (!0/253/5\$!/29!9\$4\$0' *%! .#5!2' .-' 2!' +!-2.\$2%-7!-2. ' !/<' (\$!*\$(4/%-4\$!*(' *\$(\$.7!-2#\$(2.-!-2!0-<-2/0!.\$E.%! " #-%8! .#528!/00' &%! + ' (!+329/<\$2./0!(\$+0\$, .-' 2!' 2! .#5!4\$(7! , ' 2,\$* .! ' +!*\$ \$.(78!/29!320' ,)%!/2!329\$(\$./29-25! ' +!*\$ \$.- ,! E*\$(\$%- ' 2!/%/2!\$%%\$2.-/007!0-<-2/0!*(/ , .- ,\$.#/.!0&/7%! , ' 2./-2%!/2!32\$\$.0-25!<' <\$2.! ' +! ,#/00\$25\$!*

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\!K/(/! ` /(-.<!N' 9(-53\$%T\$0-%8! ^2-4\$(%-9/9\$!]9\$\$(/0!H\$!^6\$(0z29-/!

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.#(\$/. \$2-25!6\$, /3%\$!2 ' .!(30\$!+(' <!&-.#-2!67!< '9\$(2!(/.- '2/0-.7>:!V.!-%!.#3%!.#/.! '3(!@* '0-.-, /0A!%*\$ \$\$,#!
2\$, \$%%% /(-07!(3*.3(\$%!/29! '4\$(+0' &%!.#\$!< '9\$(2D, '0'2-/0!0'5-, %!'!+!@32A(\$/%'2!/29!< '4\$%!.' &/ (9%!
<30.-*\$0\$!.'253\$%! ' +!.#\$!* '\$.-, 1* '0-.-, /0!-2!&#-, #!\$2+0\$%#<\$2.! ' +!(\$/%'2!/29!#\$/0-25!\$<6(/, \$!' +!
.\$\$!.\$((-.'(-\$%! '+D/%!0/29!/29!6'97! /(\$! , \$2.(\$9: !V! &-00! \$E*0' (\$! .#-%! \$2+0\$%#<\$2.! ' +!(\$/%'2!/29!

X!Q-<<7! ; /%/%!R0/3%\$28! i ' 2.-+j,-/!^2-4\$(%-9/9\$! ; /.k0-,/!9 '!N-'!9\$!Q/2\$-('

V2!.#\$(XhYZ%/29!XhhZ%8!4/(-\$.-%!'!+!*(\$,/(-.7!6\$, /<\$!/.!' 2,\$!, ' 2%3</60\$/29!%36B\$, .1*(' 93,-25!
9-%, ' <+.-25!/29!6\$/3.-+30!-2!/!%\$(-\$%'!+!4-%3/0!, 30.3(/0!*(' 93,.-' 2%!.#/.!9\$4\$0'*\$9!' 2!.#\$/6/%-%!'!+!
2\$'1` /0.#3%-/2!/\$%.#\$.-, %:!"#\$!(-0'5-\$%!N'D%%2&)0%6)&!@N\$55-'!XhY[8!XhYY8![ZZ[A!/29!>%''%=%*Q](-,) \$!
Xhh[8!XhY\8![ZXXA!/29!.#\$/94\$(-%-25!, /<*/-52%!'!+!a\$2\$.. ' 2!/29!.#\$/a'97!T# '*!-24-.\$9!.#\$.(!
/39-\$2,\$%!2' .!' 207!. ' !4-%3/0-L\$!e.#\$!&' (09f!/%!32-.7!63.!/0% ' !. ' !\$E*\$(-\$2,\$!./.!&' (09!-2!/!&/7!.#/.!
*' %-.-' 2\$9!.#\$<!/%! <\$<6\$(%!'!+!.#\$!]-(%.! ! ' (098! "#-(9! ! ' (09! ' (!] ' 3(.#! ! ' (09!@'+!-29-5\$2' 3%!

"#\$!/(.-,0\$!/-<%!. ' !9-%,3%%!.#\$!* '\$2.-/0!' +!/\$%.#\$.-,!* (/ ,.-,\$%8!/%!*\$\$(+' (<\$9!67!7' 325!*\$' *0\$!+(' <!
.\$\$!+/4\$0/%!/29!*\$(-*#\$(-\$%! ' +!N-' !9\$!Q/2\$-(' !. ' !9-%.3(6!/29!\$E,\$\$9!.\$\$!.\$(<%8!5/L\$%/29! *0/,\$%!
/..(-63.\$9!. ' !.#\$<:!] (' <! /!9\$, ' 0' 2-/0!*\$(%*\$,\$.-4\$8!.\$\$!/(.-,0\$!*(' * '\$%\$%!.. ' !9-%,3%%!## ' &!e*(\$,/(-.7f!

, ' < < 32-.\$%! -2! .#\$! +/, \$! ' +! 32, \$(./-2.7! .#/2! C3\$%- ' 2%! ' +! -9\$2.-.7: !V2! /! * / (/ 9-%- / 0! . ' 3(-% .! . ' & 2! -2!
2' (.#\$ / % .! a (/ L-08! 50 ' 6 / 0! \$, ' 2 ' < -, ! + ' (.32\$% ! / 29! . (\$29% ! < -5# .! (\$29\$ (! * ' * 30 / .- ' 2% ! & # ' ! (\$07! ' 2!
. ' 3(-% < ! 9-% * ' % / 60\$: ! N\$ % 30.-25! / 2E\$-.\$% ! ' 4\$ (! .#\$! +3.3 (\$! < \$ / 2! (\$%-9\$2.%! .3(2! . ' ! 32\$E*\$, . \$9! % ' 3(, \$%!
' +!, \$(./-2.7! & # \$2! .#-2)-25! ' +! & # / .! -% ! 2\$, \$% % / (7! . ' ! \$2% 3 (\$! .#\$! . ' 3(-% .! -293% . (7! % 3(4-4\$% ! / 29! .#\$-(!
' & 2! 0-4\$% ! 5 ' ! ' 2! & -.#! -.: ! ^ % -25! \$.#2 ' 5 (/ * #-, ! 9 / . / 8! V! # ' & ! .#\$7! 9 (/ & ! ' 2! < 30.-* 0\$! \$2 < \$% # \$9! #-%. ' (-\$% 8!
9-++\$ (\$2.07! -2+0\$, . \$9! 67! .#\$-(! (\$0 / .- ' 2% #-*! . ' !, ' 0 ' 2- / 0! -< / 5-2 / (-\$% ! / 29! , / *- . / 0! \$E, # / 25\$! . ' ! < /) \$!
% \$2% \$! ' +! .#\$! 32+ ' 09-25! * (\$% \$2. ! / < -9! .#\$% \$! +\$ / (% : ! N\$ % -9\$2.% ! ' (-\$2. / . \$! .#\$ < % \$04\$% ! . ' & / (9% ! 4 / (- ' 3%!
.\$ < * ' (/ 0-.\$% ! & # \$2! + / 2. / %-\$% ! ' +! * / (/ 9-%\$! < /) \$! % \$2% \$! / % ! / ! < \$ / 2% ! ' +! / 2, # ' (-25! .#\$-(! ' & 2! 0-4\$% ! / < -9!
.#\$! 9\$.\$ ((- ' (- / 0-% / .- ' 2% ! ' +! .#\$! . ' 3(-% .! \$, ' 2 ' < 7! / 29! -2! .#\$! * '\$. (7! ' +! 9 ' -25! % ' 8! \$2 / , .! / 29! 5\$2\$ (/ . \$!
.#\$-(! ' & 2! + (/ 5-0\$! & ' (09% : ! ! # / .! \$ < \$ (5\$% ! -% ! .#\$! & / 7! .#\$! 9-%% ' 2 / 2.8! / ((7.# < -, ! * (\$% \$2, \$! ' +!, \$(./-2!
*\$ ' * 0\$! / 29! ' 68\$, .% !, ' < \$! . ' ! (\$* (\$% \$2. ! / 2! / \$% .#\$- , ! % \$2% \$! ' +! .#\$! * ' . \$2.- / 0! + ' (! .#\$! , ' 2.-23 / .- ' 2! ' +!
, / *- . / 0! \$E, # / 25\$! .# (' 35# ! % ', - / 0! , 0 / % % 68! (/ .#\$ (! .# / 2! % ' 0\$07! / 2! \$2, ' 32.\$ (! & -.#! .#\$! ' .#\$ (: ! " (/ , -25! & -.#!
/ \$% .#\$- , % ! .#\$! & / 7! + / 2. / %-\$% ! 0\$ / 9! . ' ! < ' 9\$% ! ' +! * ' & \$ (! & #-, #! / % 3 / 5\$! / 2! \$ < 6 ' 9-\$9! % \$2% \$! ' +! * (\$, / (-.7!
5-4\$% ! 3% ! / ! < ' (\$! 23 / 2, \$9! 329\$ (% . / 29-25! ' +! .#\$! & / 7% ! * \$ ' * 0\$! 2 / 4-5 / . \$!, / *- . / 0! / 29!, ' 0 ' 27: !
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