





/%2\$25%2!.(!\$!<1(\$-/!\$)-5/%?/9! : %-\*!5%!6\$?.\*!5.C,!0-!/.(!-(!,(!J!>#(!-(/,%C.!>\$%.!.(!.\$;&!.(!\$%!\$)-5/%?/!.#\$!.!/\$; ;' !>\$%.!.(!&%(>!>#\$!.>/C1/!65%-5%2!\$%-!>#\$!.>/!.#5%&!\$<(!.#!#/\$%?5/%.!.>(1;-K!  
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Q(>\*!1/. )1%5%2!. (!.#/!. (85?! (6! (.#/! ! : +TL! 3 / 3 </1, !>#(!#7!/! >15../%!6(!.#/!2/%/1\$;! 8)<;5?! : 3 %(!E/%P" (1!#\$,!- (%/!\$12/%/1\$;!<((&!(!G\$M(19!X\$75-!U, ,5, #&5%!#\$, !>15../%!2/%/1\$;! <((&,\$!\$<(!.IV\$?#5, #!\$%-!%(>!@/25-- (9!T- /-!E(1(> ,&5!-5-!(%/!?\$;;/-! ? (,7)\$9,0+,\$!\$V,K7, ; (7\$%, . +5! \$%-!\$% (.#/! ! (%/! ?\$;;/-! ! 2>;, -73->+,\$, I\$N>&I\$ ! 2+\$N5>( +79+V5, \$! 4 ((8/!#\$, !>15../%!\$<(!. ! S /1.1) -/! E/;;9!L\$?#/;!G\$;;(./!-5-!(%/!(%!` 1/- /15?&!E;5, ,9!+

E5;;!X/7/1!#\$, !</%/!0.1/ 3 /; '!81(;565?!5%!.#5, !1/2\$1- \*!>5.#!\$!%) 3 </! (6!<((& ,!5%!1/?/%. ! /\$1,9!Q/5;!+5;</13 \$%\*!>#( 3 !=!.\$;&/-!.(!>#/%!=!65!, .!.#()2#!.\$<(!. !.1'5%2!. (!>15./!8(8);\$15M5%2! <((& ,\*\$!\$%-!, /7/1\$;!5 3 / ,!,5%?/!.#/%\*!#\$, !>15../%!5 3 8(1.\$%.\$!\$%-!\$??/, ,5<;/!<((& ,!(%! \_52\$/;!\_ \$-5%\*! .#/!#5, .(1'!(6!<5<;5?;\$;!\$1?#\$/ ( ; (2 '\*!\$%-!%) 3 /1(!, !(.#/!!. (85?, \*!\$%-!#/!\$%-!=\$, 1\$/; !^ 5%&/; ,./5%!>1(. /! .#/!</ , .P, /; ;5%2!<((&!%: +\$V,K7+\$BI+( >3: + '\$\$, !> /; ;!\$, !\$!<((&!(!X\$75-!\$%-!+ ( ; (3 (%\*!<(.#!(6!>#5?#! \$1/!\$5 3 / -!\$.!2/%/1\$;!\$) -5/%?/, 9!

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"#/1/!\$1/!(. #/1,!(6!' ( )!( )!.#/1/!\$, !> /; ;\*\$!\$%-!=\$8 ( ; (25M/!6(1!% ( !#\$75%2!.5 3 /!. (!#52#;52#! /\$?#!(6!' ( )!<' !%\$ 3 /9!G(>/7/1\*!3 (1/!(6) ,!J! 3 \$% ' !3 (1/!(6) ,!PP!%/ / -!. (!<15%2!( )1!> (1&! ( !;56/!6(1! .#/!8)<;5?!6\$1!3 (1/!.\$%!>/\$1/!?)11/%. ; ' !- (5%29! : , !=#\$7/!, \$5- \*!5. !5, !5 3 /!6(1) , !.(! (%? /!\$2\$5%!</25%!. (!./; ;!( )1!( >%!, . (15/ , !\$<(!.!( )!65%-5%2, !\$%-( )!.\$&/, !(%!.#/!\$%?5/%. !> (1; -9!T)1!;57/;5#( (- , \*!\$%-! .#/!6.)1/!(6!.#/!65/; - \*!- /8/%-!)8(%!5.\*!6(1!.#5, !5, !.1) /!% ( !(%; ' !6(1!( )1!;/?. )1/ , !\$% -!>15.5%2, !6(1!.#/! 2/%/1\$;!8)<;5?!<).!\$; , (!5%!( )1!?\$, , 1(( 3 , 9!!

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! B /!(77!./;;!,.(15/,\*!>#/.#/#!>/!1/\$;5M/!5.!(1!%(.9!\_/,\*!>/!-(15.!/ ,8/?5\$;;'!5%!.#/#!/?;\$,,1((3\*! <).!\$;,(!\$!-5%#/!18\$1.5/,!\$%-!6\$35;'!2\$.#/15%2,!\$,!>/;;\*!>#/#!1/!8/(8;!/!61/D)/%.;'!8/!/?/57/!),!\$,! #75%2!\$!3 )?#!3 (1/!2;\$3 (1()),!A(<!.#%\$!>/!\$?.)\$\$;;'!-(9!B#/#/#!1' )!\$1/!\$!8(../1'!8/1,(%\*\$!6\$)%\$;!/08/1.\*!\$!1\$-5(?\$!<(%!8/1,(%\*\$!\$!,&/;/.\$.!(1!XQ :!/08/1.\*!\$%!)% -/1>\$./!\$!1?#\$/;(25,.(1!\$!;\$%-! <\$,/-!(%/\*!\$!<5(P\$!1?#\$/;(25,\*!\$!/0.!8/1,(%\*\$!\$!/8521\$8#/#!\$!\$!\$!#5,..(15%\*(1!>#\$./7/1\*!>/!\$1/! \$;;!.1'5%2!.(!652)1/!(.)!>#\$.!#88%/!-<\$?&!.#/#9! B /!\$1/!/\$?#!-5225%2!\$.!,5./,(1!5%7/,..52\$.5%2! D)/,5(%,!(!>(1&5%2!(%!81(<;/3 ,!#\$.!#/#!8)<5?!>());-!</!5%./1/,./-!5%!/;\$!%5%2!\$<().9!=\$!6\$?.\*!>/! \$1/!\$;;!;&153(137)!./;;5%2!,.(15/,!\$<().!>#\$.!>/!-(?!(!>#\$.!>/!6())%\*(1!>#\$.!>/!.#5%&!#88%/!-<\$?&!5%!,(3 /!8\$1.5?);\$1.53 /!8/15(-!(1!\$!,(3 /!8\$1.5?);\$1!8;\$?/!(1.(!,(3 /!,8/?565?!21(1)8!(618/(8;/9! \_())\$;;!\$;1/\$-'!&%(>!#\$.!PP!5.j,!D)5./!5./1\$;;'!>#\$.!>/!-(!6(1!\$!;575%29!!

: % -!8/(8;!/>\$%.!.(!#/\$!>#\$.!>/!#7/!.(!,\$'!J!#/#!1/C,!%(!-/%'5%2!#\$.9!:?.)\$\$;;'!>/!%/!/-! .(!+ . K>( ;+!#\$.!6\$?.!PP!#/#!/\$!/,..5;;!8/(8;!/())!#/#!/\*!(.,!\$%-!;(.,!(6!8/(8;/\*!>#(!\$1/!5%./1/,./-9! "#/'!>/!1!#/#!1/!>#/%! :;<152#.\*!E1/\$,./-!\*B ((;/'\*!4#5;-/\*!E/;;\*\_ \$-5%\*\$!\$%-!a%'(%!>/!1/!>15.5%2! \$%-!#/'!\$1/!,.5;;!#/#!1/!%(>9!"#\$.j,!>#!'!V,K7;(7\$!>;:(+&7&2)\$W+@,+8!#\$,!</!/%!\$1())% -!6(1!3 (1/! .#%\$!6(1.'! '\$1,!)% -/!G/1,#/;!+#\$%&!\$%-!%(>!E(<!4\$125;;9!"#\$.j,!>#!'!#/#!1/!\$1/!,(!3\$%'! ./;/75,5(%!-(?)3 /%.\$15/,!?(%,.\$%.;'!</5%2!3\$-/\*!3 (.,!(6!#/#!3!(%!.#/#!,\$3 /!.(85?;!(7/1!\$%-!(7/1! \$%-!(7/1!\$2\$5%!J!

,3Y5\$K&>,I2\$3&\$\$. +I\$,3Y77\$'+0,I,3+7)\$K+\$K&>,I2\$3&\$3: + . I\$5&\$0,2->+\$&-3\$: & 8 \$3&\$\$. (6+\$,3\$I&3\$K&>,I2QI!=%!6\$?.\*!  
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**K\$M, &N3\$&E\*, 1OP8\$&Q38& : \*(&! 3&K\$&**

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J - +53, &I, 12\$G&77(=5+\*!.#/'!>1(./\*!H&->\$53&>, +5\$(>+\$I &3\$+(5)\$&\$;&I53>-; 3\$( I '\$+@+I\$: (>'+>\$&\$I (>>(3+\$

>\$,!<(1%!5%!#/#!<\$!\$!.#/#! : +TL!3 // .5%2, !\$!?)8; /!(6!' /\$1, !\$2(\*!>#/%!> /!> /1/#\$75%2!-15%&, !>5.#!  
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3 \$&/1,\*!<).!.#\$.C,!/O\$?.;'!>#\$.!#\$88%/ -!.(!3 /\*!>5.#!<(.#!3 ' !H+>-5(7+. \$V+5,+2+ '\$%-!3 '![\ \ \$ VG!<(&,9!

E).\*!=!?\$%!\$;,(!#/\$!#. #(/!(6!' ( )!>#(!\$1/!. /%)1/!.1\$?&\*!(1!>#(!\$1/!\$5 3 5%2!. (!< /\*!, \$ '5%2!.#\$.! >15.5%2!6(1!.# /!2 /% /1\$;!8)<;5?! - (/,%C.!), )\$; ' !?()%.!\$,!3 )?#!5%!./%)1/!(1!81( 3 (.5(%! - /?5,5(%,!\$,! - (!\$1.5?;/ ,!5%!A( )1%\$; ,!>5.#!\$!#52#!5 3 8\$?.!6\$?.(19! \_ ( )!\$; , (!3 \$ ' !< /!> (115/ -!.#\$.! ' ( )!?\$%C.!8)<;5,#! 8(8);\$!5M5%2!\$1.5?;/ ,!(1!<((&,!)%.5;! ' ( )!#7/!. /%)1/!< /?\$) , /!.# /!8(> /1,!.#\$.!< /!> (%C.!.#5%&!.#\$.! ' ( )C1/!, /15( ),! /% ( )2#9! : % -! = - (!3 /\$%!.#\$.! = #/\$! ' ( )N!.# /, /!\$1/!7/1 ' !1/\$;!6/\$1, !\$% -! ' ( )!\$1/!?(11/?!. .(!< /!?(% ? /1% / -9!G(> !3 \$% ' ! (6! ' ( )!6\$; ;!5%. (!(% /!(6!.# (, /!?\$ . /2(15/ ,K! ! =% !6\$? .\*! .# /1/! >\$, !\$% ! \$1.5?; /!8)<;5, # / -! < ' ! @ \$% ' \$! B #5.\$& /!1!5%! .# /!G : > & I , ; 7+ \$ & 0\$ / , 2 : + \$ # ' - ; (3, & I \$\$.!.# /! /% -!(6!+ /8. / 3 < /!> #5?#!> \$, ! /% .5. ; / - !H B #5?#!0)<;5?\$ .5(% , !@ \$.. /!\$ .!B #5?#!+ . \$2 / , ! (6!(#\$.!

#\$7/!(!\$- 35.\*!7/%!, (\*!\$%-!A), .!(1</!, \$6/\*!.#\$.!3 '!(>%!1);/!(6!.#) 3<!(7/1!.#/'!/\$1,!#\$,!</%!.(!  
.1'!.(!8)<;5, #!.>(!, ?#(;\$1;'!\$1.5?;/, \*15%?;) -5%2!?(P\$).#(1/-!85/?/, \*16(1!/7/1'!8(8);\$1<((&!(!\$1.5?;/!  
.#\$.!=!8).!().9!=!#\$, %C.!?(3 /!(.)!.(!/O\$?.;'!.#\$.!1\$5(\*!<).15.!, //3 ,!.(!#7/!>(1&/-!(.)!6\$51;'!>/;,\*  
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(I\$+I3, >+\$=&=-7(>, d, I2\$K&&69I!G(>!3\$% '!(6!'())!#7/!, \$5-!.#\$.!.(!'())1, /;6K!B /; ;\*!.(!'())\*\$%-!.(!  
/7/1'(%/!/, ;/\*!>()); -!1/8; \*!H&0\$; &->5+\$)&-\$/; (I9I! : ; ;!(6!), !#7/!#\$



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