



6] \ bS \ ba

<% < b] Rc QW\ %%%%%%%%%% *
<<% 4 ``WQZ

(% GVS US\ S' CZ RSPCHS] T bVS aWbg\$SWVbV aSaaW\ e WZ PS VSZR T] [GcSaRQ#)+ FS^bS[PS^#b] J SR\ SaRQ#) B Qj] PS')' (*%

)% GVS : S\ S' CZ4 aaS[PZg# Pg Wá `Sa] Zc bW\ - - &)+# RSQMSR bj Q\ dS\ S O VVV\$ ZsdSZ [SSbWU] T bVS : S\ S' CZ 4 aaS[PZg]\ bVS `SOZbW\] T bVS @WZ\ \ W[7 SdSZ ^ [S\ b :] CZa Q R] bVS` WbS` \ ObW\ CZg CU SSR RSdSZ ^ [S\ b U] CZa T] ` ^S a] \ a e WVRWCPWbWá] \ @] \ RQg#) * FS^bS[PS')' (*%

*% 5 g Wá `Sa] Zc bW\ - . & 0# bVS : S\ S' CZ4 aaS[PZg RSQMSR bj Q\ dS\ S O VVV\$ZsdSZ [SSbWU] \ \ cQSO RWO [Q S\ b] \ Gvc`aRQ#)- FS^bS[PS')' (*%

+% 5 g Wá `Sa] Zc bW\ - . & (0# bVS : S\ S' CZ4 aaS[PZg RSQMSR bj V] ZR O te] \$RQg VVV\$ZsdSZ RWZ ccS \ R\ bS O b] O

] UVObW\ Q

(+% GVS VWSZdSZ[SSbWU]TbVS : S\ S CZ4 aaS[PZg]\ \cQSO RWO[Q S\ be WZ

)% GVS VVV\$ZsdSZ RWZ]UcS e WZ Q\ aWb]T T]c` ^Z\ Og [SSbWUa Q R T]c`
WbS` QbWS [cZbWabOYSV] ZRS` `]c\ R bCPZSa# bj PS VSR OQJ` RWU bj bVS T]Z]e WU
aQSRcZl

(' O% %(^% % CZ\ Og [SSbWU!: S\ S`OZ4 aaS[PZg ; OZ!A]`bV?Oe \
5 cWRWU'''

(' O% %(^% % E]c\ R bCPZS (!6]\ TS\ S\ QS E]] [(!6]\ TS\ S\ QS 5 cWRWU'''

*\$ ^% % E]c\ R bCPZS) !6]\ TS\ S\ QS E]] [(!6]\ TS\ S\ QS 5 cWRWU'''

*\$ ^% % CZ\ Og [SSbWU!: S\ S`OZ4 aaS[PZg ; OZ!A]`bV?Oe \
5 cWRWU'''

(' O% %(^% % CZ\ Og [SSbWU!: S\ S`OZ4 aaS[PZg ; OZ!A]`bV?Oe \
5 cWRWU'''

(' O% %(^% % E]c\ R bCPZS * !6]\ TS\ S\ QS E]] [(!6]\ TS\ S\ QS 5 cWRWU'''

*\$ %' ^% % E]c\ R bCPZS + !6]\ TS\ S\ QS E]] [(!6]\ TS\ S\ QS 5 cWRWU'''

*\$ ^% % CZ\ Og [SSbWU!: S\ S`OZ4 aaS[PZg ; OZ!A]`bV?Oe \
5 cWRWU'''

)*% < b] Rc Q] `g abS[S\ ha e WZ PS [ORS Pg bVS C SaWS\ b]T bVS : S\ S`OZ
4 aaS[PZg#bVS FSQ SbOg\$: S\ S`OZ#bVS C SaWS\ b]T bVS 8 Q]] [WQ R F] QWZ6]c\ QW#
Q S[WS\ b ^S`a] \ W bVS TWZR]T [W O W\ Q R RsdSZ ^ [S\ b Q R O [W Q b Ob bVS
PSUW\ WU]T bVS ^Z\ Og [SSbWU] \ bVS [] \ WU] TGvc` aRQg#* B Q] PS` %

) +% GVS bVS [Sa] T bVS T]c` `]c\ R bCPZSa e WZPS Qa T] Z]e a1

E]c\ R bCPZS (1 4 aaSaaWU bVS STISQa]T WbS\ O W\ OZ [W O W\] \ acatOWCPZS
RsdSZ ^ [S\ b Q R WS\ b Wg WU `SZsdQ b ^ W W W a W d W e]T bVS
^ S^ O O W\]T bVS ^] ab\$) ' (, RsdSZ ^ [S\ b T Q Se] `Y

E]c\ R bCPZS) 1 @SQac`Sa bj S\ ac`S `Sa^SQb T] ` Q R ^] bSQW\]T bVS Vc [Q `W W ta
]T OZ [W Q ta#e W W ^ O b W Q ZD `SIS`S\ QS bj e] [S\ Q R Q W W S\ # Qa
e SZZ Qa bj ^ SdS\ b Q R Q [POb bVS a [c U U W U]T [W Q ta Q R
b O W W W W ^ S`a] \ a Q R bj S\ ac`S] `RS`Zg# `SUcZD Q R a OIS
[W O W\

E]c\ R bCPZS * 1 FbS\ U bVS\ WU ^ O b S`a W Wa Q R Q] ^ S` O W\] \ WbS\ O W\ OZ
[W O W\ # [SQVQ W a bj STISQWWSZg WbSU O S [W O W\ Wb
RsdSZ ^ [S\ b ^] Z Q W a Q R ^] [] b W U Q VS`S\ QS Ob OZZsdSZ

E]c\ R bCPZS + 1 < bS\ O W\ OZ Q R `SUW\ OZ ZP]c` [] P W W g Q R W W W ^ O Q b] \
RsdSZ ^ [S\ b

), % G] OZ]e T] ` [G W c [^ O b W W O W\ e W W W bVS Z W WSR b W S Q i O W P Z S #
abS[S\ ha W bVS ^Z\ Og [SSbWUa Q R bVS `]c\ R bCPZS RWQ`aaW\ a e WZPS Z W WSR bj
T]c` [Wc bSa#] \ bVS c\ RS` abQ RWU b VOb b VOb e]cZR \] b ^ SQc RS bVS RWb Wc b W\]T
[] `S Sf bS\ a W S b S f ha %

) - % 4 ZWb]Ta^SOYS`a W]^S\ T]^ WaQ WbW\ #] \ OTWabSQ [S#TWabfaS`dSR PQaW#W
`]] [F\$*' /) !SS[OX ^] ZWY] dOB c\ %`L2 bSZA^V]\ S1)() 0- * , ' - *2 TCF 1)() 0- *
* . / * "%7 SZSUObW\ a OS QhYSR bj YWRZg WRWQbS bVS ZsdSZ] T`S^`SaS\ bObW\ Ob bVS
bW S] TWaQ WbW\ %

). % Fc[[O W a] T bVS RSZPS`ObW\ a] T bVS T] c` `] c\ R bCPZS RWQaaW\ a e WZ PS
^`SaS\ bSR Pg bVS QVOWa] T bVS `] c\ R bCPZSa Rc`WU bVS Q\ QZ RWU aSU\ S\ b Ob bVS
^Z\ Og [SSbWU] T bVS VWV\$ZsdSZRWZ] UeS] \ bVS OibS` \]] T 9` WQ# + B Q] PS %
GVS F^SQWZES^`SaS\ bObWS] T bVS FSQ Sbo g\$: S\ S`OZ] \ < bS\ ObW\ OZ @ W ObW\ Q R
7 SdSZ ^ [S\ b e WZ OZ] PS WdWbSR bj a^SOY%GVS C`SaWS\ b] T bVS : S\ S`OZ4 aaS [PZg
e WZQZ] aS bVS [SSbWU %

)/ % 9c`bVS` W T] [ObW\] \ bVS VWV\$ZsdSZRWZ] UeS W Q \ bWbSR W bVS \] bS Pg bVS
FSQ Sbo g\$: S\ S`OZ] \ bVS] `UQ WObW\] T bVS VWV\$ZsdSZRWZ] UeS] \ WbS\ ObW\ OZ
[W ObW\ Q R SdSZ ^ [S\ b!4 &/ &-) "%

) 0% 6] \ TS`S\ Q E]] [+ !A] `bV? Qe \ 5c WRWU' e WZaS`dS Qh Q] dS`TZe `]] [T] `
bVS VWV\$ZsdSZRWZ] UeS# WQZ RWU T] ` bVS] ^S\ WU Q R QZ] aWU ^Z\ Og [SSbWUa Q R
bVS `] c\ R bCPZS RWQaaW\ a%

*' % 4 a WRWQbSR CP] dS !aSQ%<`#bVS US\ S`OZRSPQbS] T bVS aWbg\$SWWbV aSaaW\] T
bVS : S\ S`OZ4 aaS [PZg e WZ PS VSZR T] [GcSaRQ#) + FS^bS [PS# bj J SR\ SaRQ#
) B Q] PS `) (* %GVS [SSbWUa] T bVS US\ S`OZRSPQbS e WZ PS VSZR T] [0 O% %b]
(^% %Q R T] [* ^% %b] 0 ^% %e Wb bVS Sf Q^bW\] T bVS [SSbWU] \ bVS [] \ WU
] T Gvc`aRQ#) - FS^bS [PS# e WbW e WZatOb Ob (' O% % OibS` bVS] ^S\ WU] T bVS
VWV\$ZsdSZ [SSbWU] \ \ cQSO RWO [Q S\ b#bj PS VSZR T] [0 O% %b] (' O% %W bVS
: S\ S`OZ4 aaS [PZg ; OZ%

* (% GVS Qe`S\ b ZWb] T a^SOYS`a W QIOXCPZS W `]] [F\$*' /) %4 \ g QVQ US] `
Sf QVQ US] T a^SOY WU aZ] ba Q] \ U @S [PS` FbOsa aV] cZR PS Q [[c\ WQbSR W
e`WbWU bj bVS : S\ S`OZ 4 aaS [PZg 4 TIOWa 5`Q Q# `]] [F\$*' /) !SS[OX
^] ZWY] dOB c\ %`L2

*, % FbOs[S\ ba [CRS W Q g] T bVS aW] T W Q W Z Q U c O U Sa] T bVS : S\ S' O Z 4 aaS[P Z g
O S W b S ^ ^ S b S R W b] bVS] bVS ^] T W Q W Z Q U c O U Sa%4 \ g a^ S O Y S ^ [O g O Z] [O Y S O
a b O S [S\ b W O Z U c O U S] bVS b V O bVS] T W Q W Z Q U c O U Sa% < ac Q V Q O Sa# W

+(% GVS a^SQWZSdS\ b] T bVS C^ SaWRS\ b] T bVS : S\ S^ OZ4 aaS[PZg b] T] Z] e c^ bVS
STI]`ta [CRS b] QQWdS bVS @WZS\ W[7 SdSZ^ [S\ b :] OZa e WZ PS VSZR]\
) , FS^bS[PS `)' (*#T][0 O% %b] (^% %Q R T][* ^% %b] - ^% %QQ`RWU b]
bVS T] Z] e WUaQVSRcZS1

0\$(' O% % B^S\ WU^ZS\ Og [SSbWU!G^catSSaVW 6] c\ QWZ6 VQ PS "

(' O% % (^% % E] c\ R bCPZS (!G^catSSaVW 6] c\ QWZ6 VQ PS "

E] c\ R bCPZS) !8Q \] [WQ R F] QWZ6] c\ QWZ6 VQ PS "

*\$- ^% % E] c\ R bCPZS * !G^catSSaVW 6] c\ QWZ6 VQ PS "

E] c\ R bCPZS + !8Q \] [WQ R F] QWZ6] c\ QWZ6 VQ PS "

- \$- %' ^% % 6Z aWU^ZS\ Og [SSbWU!G^catSSaVW 6] c\ QWZ6 VQ PS "

+) % GVS] ^S\ WU^ZS\ Og [SSbWU] T bVS SdS\ b e WZQ\ aWb] T abOs[S\ ta Pg bVS
C^ SaWRS\ b] T bVS : S\ S^ OZ4 aaS[PZ#bVS FSQ StOg\$: S\ S^ OZQ\ R O\ c[PS] T; SCRa] T
FbOs] ` :] dS\ [S\ b#Qa e SZZQa] bVS a^SOYS a WdWRSR Pg bVS C^ SaWRS\ b%GVS Q] aWU
^ZS\ Og [SSbWU e WZQ\ aWb] T O^ SaS\ bObW\] T bVS ac[[O W a] T bVS `] c\ RStCPZS
RSZPS ObW\ a Q R bVS S\ R] `aS[S\ b] T bVS] c bQ [S R] Qc[S\ b%

+*% GVS `] c\ RStCPZS RWQaaW\ a e WZPS VSZR c\ RS^ bVS aQ S P] CR bVS[S#T] QaWU
]\ UO^a Q R e SOY\ SaaSa Q R bVS QQZS ObW\] T bVS W^ZS[S\ bObW\] T bVS
@WZS\ W[7 SdSZ^ [S\ b :] OZa# Qa e SZZ Qa Z] YWU T] `e OR b] bVS ^] ab\$)' (,
RSdSZ^ [S\ b CUS\ RO%4 ZAb] Ta^SOYS a W] ^S\ T] ` WaQ WbW\ #] \ OTWabSQ [S#TWab\$

SdS g QWRn# FcatOWCPZ 8\S Ug Tj` 4ZZ# 8RcQbW\ 9Wat# bVS MS] ; c\ US
6 VOZS\ US Q R bVS 6 OZZb] 4 QbW\]\ FO\ WbW\ %

+. % 7c`WU bVS Tj`c[#; SCRa]T FbOS Q,R :]dS\ [S\ b# QWST Sf SQe bWS]TWs a
T][bVS PcaW\Saa aSQ]`#^VWQ bV]^Wba O,R QWVZa] QWbg ZSCRS`a# Qa e SZZQa VSCRa
]T H\ WSR AObW\ a OUS\ QSa# Tc\ Ra O,R ^]UQ [Sa O,R]bVS` WbS\ ObW\ OZ
]\`UQ\ WObW\ a#e VZVQdS Q]^^`\tc\ Wg bj RWQ:aa bVS [SO a]TW^ZS[S\ bObW\ bVOb
e VZ [ObQ\ Q PObW\ a e WbW Q\ QStS [SQVO\ W[a O,R `Sa]c`QSa%GVS FSQStO g\$
: S\ S`OZe VZ^`dWRS]^S\ WU`S[OYa Ob bVS Tj`c[# e VbW e VZ PS TjZ]e SR Pg
Q\ b WcbW\ a T][O\c[PS]T^O\ SZZW%GVS C SaWRS\ b]T bVS : S\ S`OZ4 aaS[PZg
O,R bVS 7 S^ctg FSQStO g\$: S\ S`OZe VZ^`dWRS Q\ QZRWU`S[OYa%

+ / %

, (% 4 QQ SRWObW\]T] TIVWZRSZUObW\ a Q R [S[PS`a]TbVS ^ObVsa]T; SCRa]T
FtObS]` :]dS\ [S\ b# I WbSC SaVRS\ ba Q R 6`]e\ C`WQSa]` C`WQSaSa e WZ PS
QQ`WR]cb Pg bVS C`]b] Q Z Q R ? WbW\ FS`dWb% @ WbW\ a& TIVWsa OS`S_cWSR b]
acP[W bVSW OQQ SRWObW\ `S_cSata Pg caWU bVS \Se]\ ZWS agabS[#
n#4 QQ SRWObW\ n# dW bVS e SPaVbS Ob Vtb`al&SQQ SRWObW\ %\ %Wb% GVS C`]b] Q Z
B TIVW VQa Q [[c\ WObSR b] OZZ[WbW\ a& TIVWsa W ASe L]`Y Pg [SQa]T O\]bS
dS`PObS RObSR () =cZg)' (* ^) dWRWURStObW\]TbVS]TIVWZQe\ QV]TbVS\ Se]\ ZWS
OQQ SRWObW\ agabS[#b] USbVS` e WbV m c`VRSZVsa]\ S4 QQ SRWObW\ n Q R n9`S_cS\ bZg
4 aYSR DcSabW\ an%GVS W]] [ObW\ QQ OZa] PS T]c\ R]\ bVS C`]b] Q Z Q R ? WbW\
FS`dWb e SPaVbS !e e e %\ %Wb&`]b] Q Z %9]` bVS acP[WbW\]T`S_cSata T]` U]c\ Ra
Q R I <C ^QaSa# [WbW\ a& TIVWsa aV]cZR T]Z]e bVS ^] QSRc`S`SIS`SR b] W bVS
Uc`VRSZVsa%

,)% ; SCRa]T FtObS]` :]dS\ [S\ b# I WbSC SaVRS\ ba# 6`]e\ C`WQSa]` C`WQSaSa
Q R bVSW a^]caSa e WZ PS]TIS`SR I <C ^QaSa e WbV]cb ^V]b] U O`Va%7 S^cbg C`W S
@ WbVbS a# 6 CPWsb [WbVbS a Q R bVSW a^]caSa e WZ PS ^]dVRSR e WbV I <C ^QaSa
e WbV ^V]b] U O`Va%

, % GVS e]`Y WU V]c`a]TbVS OQQ SRWObW\ c\ W!bZS^V]\ S1) () 0 - * . (/ (" W bVS
C`]b] Q Z Q R ? WbW\ FS`dWb W bVS RQa ^`W` b] Q R Rc`WU bVS VbVbSdSZ[SSBWLa
Q R bVS US\ S`OZRSPObS e WZ PS ^]abSR]\ bVS C`]b] Q Z Q R ? WbW\ FS`dWb e SPaVbS
Q R ObVS S\ b g]TbVS C`]b] Q ZB TIVW atObWU]\ GcSaRQ## FS^bS[PS`)' (* %

, +% 7 c`WU bVS VbVbSdSZ[SSBWLa Q R bVS US\ S`OZRSPObS]TbVS aWbg\$SWVbV
aSaW\]TbVS : S\ S`OZ4 aaS[PZg # T] [] * FS^bS[PS` b] + B Q] PS`)' (* # OQSa b]
bVS : S\ S`OZ4 aaS[PZg ; OZZQ R`Sab WbSR OSQa e WZ`S_cWS O`SUcZO RSZUObSla ^Qa
^Za OaSQ\ RO g Q] Z c`SQ] RSR OQSa QO R %GVS OQSa QO Ra OS b Q aIS`CPZ ab WbZg
Q]] U [S[PS`a]TORSZUObW\ %9]` bVb ^c`^] aS# bVS C`]b] Q Z Q R ? WbW\ FS`dWb
e WZ ^] QSSR Qa T] Z]e a1

!O' 8 dS`g CS` [Q S\ b @ WbW\ e WZ PS WacSR T]c` QORa]T]\ S Q] Z c` T]
OQSa b] bVS : S\ S`OZ4 aaS[PZg ; OZZW bVS A]`bV ? Qe \ 5 c`WRWU Q R T]c` QORa]T O
RWIS S\ b Q] Z c` T]` OQSa b] bVS A]`bV ? Qe \ 5 c`WRWU Z] PPg%GVSaS QORa e WZ PS
dOZR T]` bVS S\ bVS ^S`WR]TbVS VbVbSdSZ[SSBWLa Q R bVS US\ S`OZRSPObS]TbVS
aWbg\$SWVbV aSaW\]TbVS : S\ S`OZ4 aaS[PZg # T] [] * FS^bS[PS` b] + B Q] PS`
)' (* 2

!P" 8 QV WbS`U] dS\ [S\ bOZ]`UO WObW\ e WZ PS WacSR b]] Q] Z c`SQ] RSR
OQSa QORa Q R SOQV a^SQWZSR CLS\ Qg e WZ PS WacSR]\ S Q] Z c`SQ] RSR OQSa
QOR T]` OQSa b] bVS : S\ S`OZ4 aaS[PZg ; OZZ W bVS A]`bV ? Qe \ 5 c`WRWU W
CRRW\ # SOQV WbS`U] dS\ [S\ bOZ]`UO WObW\ Q R a^SQWZSR CLS\ Qg e WZ`SQSWs
b]] QORa]TORWIS S\ b Q] Z c` T]` OQSa b] bVS A]`bV ? Qe \ 5 c`WRWU Z] PPg2

!Q' 4 OQSa QORa# W`S_cWSR# e WZ PS WacSR b] `S^`SaS\ bObVsa]T @S[PS`
FtObSa#]PaS`dS`a# WbS`U] dS\ [S\ bOZ]`UO WObW\ a Q R a^SQWZSR CLS\ QSa

^ObWObWU W]bVS` Q] aSR&Sab WbSR VWV\$ZdSZ[SSbWLa T]` CQSa b] Q \ TS` S\ QS
`]] [a W bVS A]`bV? Qe \ 5 c WRWU Q R bVS 6] \ TS` S\ QS 5 c WRWU %
, , % 6] Z c` \$Q] RSR CQSa QORa T]` bVS VWV\$ZdSZ[SSbWLa Q R bVS US` S` OZRSPQbS
e VZPS` `SORg T]` Q] ZSQW\ Q bVS C`] b] Q] ZQ R ? W] \ FS` dWS abObWU] \ 9` WQg#
)' FS`bS [PS`)' (*#OHS` (' Oj %
, - % FSCh e VZPS` `SaS` dSR W O I <C O SO T]` a^] caSa] T bVS ; SCRa] T FbHS]`
:] dS` \ [S\ b# I W\$C Sa VRS\ ba# 6`] e \ C` WQSa]` C` WQSaSa ^ObWObWU W bVS
US` S` OZRSPQbS#` ^] dWSR bVOb bVS 6 VST] T C`] b] Q] Z W \] bWSR W CRdQ QS] T bVSW
OHS\ RO QS% \ CRRW\ #RS^S\ RWU] \ QdOZPWg#OZW WSR \ c [PS`] TaSCh e VZPS
`SaS` dSR T]` UcSaba] T RSZSUObW\ a W O` SaS` dSR aSQW\ !c^ b] SWWb aSCh"] T bVS
: S\ S` OZ4 aaS [PZg ; OZRc` WU bVS CRR` Saa] T bVS VSCR] T RSZSUObW\ Q bVS ^Z\ Og
[SSbWU%4 CQSa b] bVSaS O SCh e VZ` S_c WS O a^ SQWZ Q c` bSag bWYSb RWb WcbSR Pg
bVS C`] b] Q] ZQ R ? W] \ FS` dWS%G] `SaS` dS aSCh W bVS I <C O SO T]` a^] caSa Q R W
bVS `SaS` dSR aSQW\ T]` UcSaba] T RSZSUObW\ a W bVS : S\ S` OZ4 aaS [PZg ; OZ# O
e `WS\ `S_c Sab a^ SQWg WU bVS \ Q Sa Q R bV\$Sa] T OZ OHS\ RSSa !WQc RWU# e VS` S
`SZdO b# bVS a^] caS] T bVS RW\ W Og a^ SOYWU' [cab PS RSZWS` SR b] bVS 6 VST] T
C`] b] Q] Z W `]] [FS`)' (]` TC`

- ' % @`a%5 Q F]]\ \$OSY e WZV] ab OP`SOYIab`SQS^bW\]\ bVS aSQ\ R TQ]]`]TbVS
A]`bV?Qe \ 5c WUWUW bVS OSOCRXXS\ bbj 6]\ TS S\ QS E]] [8 W bVS []\` WUQ R
ObSO`SQS^bW\ Ob bVS `SaRS\ QS W bVS OIbS\]]\]\ GcSaRQ#)+ FS^bS[PS`)' (*#Qh
e SZZQh OQzZc`CZSdS\ b]\ J SR\ SaRQ#), FS^bS[PS`)' (*#W V]\]c`]TbVS a^]caSa
]T; SCRa]TFbS]` :]dS\ [S\ bI WSSC SaRS\ ta Q R 6`]e \ C WQSa]` C WQSaSa
^ObWUWU W bVS aWbg\$

-- % GVS] ^S\ WU bW Sa] TbVS ^SRsab W S\ b Q QSa OS Qa T] Z] e aI
+*`R Fb SSb Q R 9 Wab4 dS\ cS1 - O% %b] Q] aS] TPcaWSaa
+- bV Fb SSb Q R 9 Wab4 dS\ cS1 . O% %b] Q] aS] TPcaWSaa
+. bV Fb SSb Q R 9 Wab4 dS\ cS1 . O% %b] Q] aS] TPcaWSaa

- . % CZQaS PS Qe OS bVb OZZ^OQYOUSa P`] cUmb]\ b] bVS ^`S[Wsa Pg OZZQbSU] `Wsa
] T^S`a] \ a# WQZRWURSZSUOba Q R atOT#e WZPS acPXSQb] aSQe` Wg Wa^SQbW\ %

- / % C`W` O`Q US[S\ ta OS `S_c WSR T] ` ^`Saa Q R OTWOba Rc`WU OOb`\$V]cbfg %oo
OQSa b] bVS ^`S[Wsa bV]cUV \] bWQbW\ b] bVS FSQe` Wg B^S`bW\ a 6 S\ bS
!bSZ^V] \ S1) () 0- * - - - - "%

- 0% 4 QSa b] bVS F] cbV 4 \ \ Sf Q R bVS ? W`Og 5 c WRWU ^`W` b] - O% %[Qg PS
UOWSR Pg caWU bVS +*`R Fb SSb S\ b Q QS Q R ^`] QSRWU b] bV] aS OSQa dW bVS
FSQStO Wb 5 c WRWU Z] PPg%

. ' % 7 c`WU bVS aWg\$SWbV aSaaW\ # bVS RSZSUObal ^SRsab W S\ b Q QS UOb#
Z] QCSR Ob +, bV Fb SSb Q R 9 Wab4 dS\ cS1 - O% %b] Q] aS] TPcaWSaa WZPS W Sa a R

FCtc`RQg Q R Fc\ RQg#(+ Q R (, FS^tS[PS`	0 O% %b] , ^% %
@]\ RQg#(- FS^tS[PS`	0 O% %b] - ^% %
Gc SaRQg#(. FS^tS[PS`	0 O% %b] - ^% %
J SR\ SaRQg#(/ FS^tS[PS`	0 O% %b] - ^% %
GVc`aRQg#(0 FS^tS[PS`	0 O% %b] - ^% %
9`WRQg#)' FS^tS[PS`	0 O% %b] - ^% %
FCtc`RQg#)(FS^tS[PS`	(' O% %b] - ^% %
Fc\ RQg#)) FS^tS[PS`	(' O% %b] - ^% %
@]\ RQg#)* FS^tS[PS`	/ O% %b] - ^% %
Gc SaRQg#+ FS^tS[PS`	/ O% %b] - ^% %
J SR\ SaRQg#), FS^tS[PS`	/ O% %b] - ^% %
GVc`aRQg#)- FS^tS[PS`	/ O% %b] - ^% %
9`WRQg#). FS^tS[PS`	/ O% %b] - ^% %
FCtc`RQg#)/ FS^tS[PS`	0 O% %b] (^% %
Fc\ RQg#)0 FS^tS[PS`	6 Z] aSR
@]\ RQg##*' FS^tS[PS`	/ %' O% %b] - ^% %
Gc SaRQg#(B Q] PS`	0 O% %b] +% ' ^% %
J SR\ SaRQg#) B Q] PS`	0 O% %b] +% ' ^% %
GVc`aRQg##* B Q] PS`	0 O% %b] +% ' ^% %
9`WRQg##+ B Q] PS`	0 O% %b] +% ' ^% %

5 SUW\ WU]\ @]\ RQg#. B Q] PS`)' (*# OZZ^Qaa Q R WRS\ bWQbW\]^S`ObW\ a e WZ
`Stc` \ b] bVS CQaa Q R <RS\ bWQbW\ H\ W#`]][H\$(' # HA<G4 E 5 c WRWU# Q R bVS
V]c`a]T]^S`ObW\ e WZPS T][0 O% %b] +% ' ^% %

. +% @S[PS`a]T bVS [SRW !P] bV `SaWRS\ b Q] ``Sa^] \ RS\ ta e W W S_cW[S] b Q R
\]\ \$SaWRS\ b Q] ``Sa^] \ RS\ ta e W W]` e W W]cb S_cW[S] b' e V] e W W b] S] bS` bVS
: S] S` OZ4 aaS[PZg ; OZW bVS A] `bV ? Qe \ 5 c WRWU[cabcaS bVS +- bV Fb SSb [SRW
SS] W\ QSSW- bW]P` OSbW \ bW Q S []c]]aWU] VS]S`SS\ bZU]S]]S a]S` S\ Sa]V] SaR

: S\ S' OZ4 aaS[PZg 5 cWRWUe WZPS`S_c WSR bj caS bVS`Q ^ Z] QOHR]\ bVS SQabaWRS
] T bVS : S\ S' OZ4 aaS[PZg 5 cWRWU Q R bVS abOWQaSe WVV bVS \ SOY O SO bj bVS bVWR
TZ]`%GV] aS [SRW^S'a] \ SZ e V] e WV bj ^] QSSR bj bVS @SRW6S\ bS !6]\ TS\ S\ QS
E]] [(#A)`bV ? Qe \ 5 cWRWU' T] Z] e WU bVS aQ SS\ WU ^] Qaa e WZ ^] QSSR T] [
bVS bS\ b O SO CQ] aa bVS ^ZChO Q R caS bVS [StCZabOWQaS R] e \ bj bVS U] c\ R TZ]`#
^QaaWU bV] cUV bVS a] cbV aWRS R]]`a bj bVS `SO S\ b O QS] T 6]\ TS\ S\ QS E]] [(%
I WRS] Q Se a CQQ] [^O g WU`SaWRS\ b O R \] \ \$ SaWRS\ b Q ``Sa^] \ RS\ ba# Qa e SZZ Qa CZZ
QO bSU] `Waa] T bS [^] `O g Q] ``Sa^] \ RS\ ba# e WZ caS] \ Zg bVS +- bV F6 SSb S\ b O QS#

S\ bQ QS OS `S_c WSR bj PS W ^] aaSaaW\] T bVS `S_c WWS H\ WSR AOb\ a\$WacSR
U] c\ Ra ^Qaa W] `RS` bj UOW QQSaa bj bVS ^`S[WSa%9c`bVS [] `S# W W W ^] `bQ bbj
\] bS bVOb OdCZR U] c\ Ra ^Qaa Q R Q Qe bV] `WSR H\ WSR AOb\ a RSQZ! WacSR Pg bVS
: OCLS 4R[W W b Ob\ " e WZ PS `S_c WSR Ob bVS +- bV Fb SSb Q R FSQ\ R 4 dS\ cS
dSVWZ QVSQY^] Wb^ W` bj bVS U Q b WU] Tac QV QQSaa%

/' % 9` [@] \ RQg bj 9` WQg# dSVWZSa] bVS` bVQ bV] aS PSZ \ UWU bj bVS VSCRa] T
RSZSUOb\] T bVS CS [Q S\ b @ W a\ a] ` BPaS` dS` @ W a\ a bj bVS H\ WSR AOb\ a
e WZPS ^S [WSR QQSaa bj S\ bS` bVS UOCLS bV] cUV bVS +/ bV Fb SSb S\ b Q QS%H^] \
bVS Q\ QZ aW\] T bVSW] T W W Z Q W W g# bVSg [Qg RS^ObbV] cUV bVS +*` R Fb SSb Sf W%
GVS +/ bV Fb SSb Q R +*` R Fb SSb S\ b Q Qa e WZ PS] ^S` Ob\ CZ] \ O)+\$V] c` PQa W%
G O T W Z Q Sa e W W bVS bVWR PQaS [S\ b aS` d W S R W S Q R `] CRe Qga W bVS UOCLS
[cabPS YS` bT SS] T a Ob\ O g dSVWZSa Ob CZ b W Sa% d SVWZSa Z Tb W bVOb OSOe WZPS
acP X Q b bj e W U% \ b `

O S

/(% 4 ZZ dSVWZSa S\ bS` WU; SCR_cOb` a ^`S [W Sa \ bVOb W W S\ bS` W W Z Q Qsb [\

/- % <bW`SQZZSR bVcbVS FSQStO g\$: S\ S`O#W OZShS` RObR (0 4 ^`VZ)' (*#WdWbSR
; SCRa] T FtCbS]` :]dS\[S\ b bj Q\ aWRS` aW\ WU Q R `CbWg WU]` CQQRWU bj
[cZVbS`OZb SCbSa RS^] aWbR e Wb VW R c`WU bVS US\ S`OZRSPCbS] TbVS aWbg\$SWbV
aSaaW\] TbVS : S\ S`OZ4 aaS\ PZg%

/. % GVS b SOcg SdS\ be VZPS VSZR T] [) + bj) - FS^bS[PS` Q R T] [*' FS^bS[PS`
bj (B Qj PS`)' (* W bVS b SOcg \$aW\ WU O SOW bVS A] `bV ? Ce \ 5 cWRWU !RSaW\ CbSR
O SO] \ bVS TWab Tj]` "%4 ^^] Wb\ S\ ta Tj ` aW\ Crc`S#` CbWQCbW\]` CQQRaaW\ aV] cZR
PS O`Q USR e SZZ W CRdQ QS e Wb bVS G SOcg FSQbW\ !bSZ^V] S1) () 0- * , ' + . "%
GV] aS Qj c\ b Wsa WbS\ RWU bj `CbWg Q R &` CQQRs bj O Qj \ dS\ bW\]` b SOcg [cab
acP[WQ ^Wsa] TbVSW Wab c[S\ ta bj bVS G SOcg FSQbW\ Tj] `SdWe Pg - FS^bS[PS`
)' (*%GV] aS Qj c\ b Wsa WbS\ RWU bj aW\ OQj \ dS\ bW\]` b SOcg [cabacP[WQ ^Wsa] T
bVSW TeZZ^] e S a bj bVS G SOcg FSQbW\ Tj] `SdWe Pg - FS^bS[PS`)' (*%baV] cZR PS
]] bSR bVcb; SCRa] T FtCbS]` :]dS\[S\ b Q R @WbS` a Tj] 9]` SW\ 4 TIOwA R] \] b
`S_cWS TeZZ^] e S a bj aW\ %6] ^Wsa] T Wab c[S\ ta Q R TeZZ^] e S a [Qg PS Tc SR bj
bVS G SOcg FSQbW\ Cb) () 0- * *- 0*%

// % <Tj] [CbW\ `SZbWU bj bVS b SOcg SdS\ b# WQZ RWU bVS ZShS`] T WdWbW\ T] []
bVS FSQStO g\$: S\ S`O#bVS Q\ cOZ^cPZCbW\] \ b SCbSa S\ bWbSR
O ZAb] T OZZ [cZVbS`OZb SCbSa RS^] aWbR e Wb
bVS FSQStO g\$: S\ S`OZ Q R ^`] QSRc`OZ Wj] [CbW\ QQ PS] PtoWbSR T] [bVS H\ WbSR
A CbW\ a G SOcg 6] ZSQbW\ e SPaWS !Vb^ l&b SCbSa% \ %`U"%

/0 % < ORRW\ bj bVS ; SCR] T FtCbS]` :]dS\[S\ b] ` @WbS` Tj] 9]` SW\ 4 TIOwA#
be] WRWbRc OZ^ S` RSZSUObW\ e VZPS ^S [WbSR Cb bVS SdS\ b%baV] cZR PS]] bSR bVcb
W W bVS `Sa^] \ aWbWg] T bVS RSZSUObW\ bj SaQ `b bVS `S^ SaS\ bCbWS e V] e VZPS
c\ RS` bOYWU bVS `SZsdQ b b SOcg CQbW\ bj bVS dS\ cS TWS [WcbSa ^` W` bj bVS
aQVSRc ZR O^] Wb\ S\ b%4 ^`] bj Qj Z] TIOwS` e WZU SSb Q R SaQ `b RW\ WO Wsa !; SCR] T
FtCbS]` :]dS\[S\ b & WbS` SaWbS\ b6`] e \ C` WQS]` C` WQSa" T] [bVS SaQZCb] `a
W bVS [OW VOZZ%

0' % <baV] cZR OZ] PS]] bSR bVcb# W] `RS` bj UOW CQQRaa bj bVS ^` S [Wsa R c` WU bVS
)' (* b SOcg SdS\ b# \ CbW\ OZ [SRW [cab VQIS ^` SdWcaZg] PtoWbSR ^`] ^S` [SRW
CQQRWbW\ T] [bVS @SRW4 QQ SRWbW\ Q R ? WbW\] H\ W%

0(% 8 QV RSZSUObW\ aV] cZR RSaW\ CbS Q WRWbRc OZ Qa O Qj \ bCb ^S` a] \ Tj] bVS
^c^] aSa] TbW SdS\ b%

0)% @SRW `S^ SaS\ bCbWsa e Wb O dOZR H\ WbSR A CbW\ a U] c\ Ra ^Qaa e VZ PS
OZ] e SR bj Qj dS` bVS US\ S`OZ RSPCbS Q R] bVS` VWbSZsdSZ [SSbWUa e Wb] cb
ORRW\ CQQR SRWbW\ %

0*% 4 ZZ] bVS` a e V] R] \] b VQIS O dOZR ^Qaa
% GVSg [cab OZ] TWZ] cb Q] \ ZWS [SRW
`SUWb CbW\ Tj] [!QIOWPZS Cb e e e % \ %` US & SRW CQQR SRWbW\ &] ["% Ge]
^WQSa] T ^V] bj WbS\ bWbW\ !ac QV Qa O^ Qaa^] `# OR` WbS` la ZW\ QS] ` FtCbS <7 " OS
OZ] `S_cWSR e VS\ ^QaaSa OS ^WbSR c^%

0+% 4ZZ[S[PS a]T bVS [SRW CQQ[

(' *%GVS [SRW QS\ bS T]` OZZ[SRW e WZPS W 6]\ TS\ S\ QS E]] [(# W bVS A)`bV
? Oe \ 5 c WRWU%

(' +%

((%)FtOb[S\ba W bVS]`WVWZ Z\UcOUS W e WQV bVSg e S'S RSZWS SR e VZ PS
QdOVPZ]\ bVS CO'S F[Ob^]`bZ Ob ^O'S af Ob%[\ SSbWUa%`U%F^SQWZ`S_cSaba
T]`O`SQ`RWU]T bVS Wbs`^SbW\ W]\ S]T bVS aW]TWVWZ Z\UcOUSa aV]cZR PS
[CRS W CRdQ Q2 bVS QdOVPWg]T acQV`SQ`RWUa acPXSQ b] bVS ZW WOb\ a]T
`SQ`RWU`TOQWWSa%

((*%? W WSR`CRW`atcRW TOQWWSa e VZ PS ^`]dWSR b] RSZSUObSa Q,R CQQSRWSR
Xc`\ZWba# e VS\ QdOVPZ# Rc`WU bVS US\ S`OZ RSPCH%GVS`S e VZ PS QVOUSa b]
Q dS` bVS ORRW\ CZQ\`b`CQ]` Q`aba T]` Oib`\$V]c`a caS%0]``CRW`atcRW QdOVPWg
Q,R Q`ab SabW ObSa T]` Oib`\$V]c` caS#Q\`bCb bVS 5`]CRQab Q,R 6]`TS`S\ QS Fc^^]`b
FSQW\ !SS\ OMI`S_cSab\$T]`\$aS`dW\$3 c\`%`U2 bSZ^V]\ S1)() 0- * 0+/, " Q,R Q`^g
H\ WSR AOb\ a ECRW`!P] PP3 c\`%`U#Ye WbY]e aYW`c\`%`U`%

((+%GVS H\ WSR AOb\ a e SPaWS !Vb^l& e e %\`%`U&O' e VZ ^`]dWSR# bV]cUV O
RSRWQSR ^]`bZ e SP ^OUS# Q dS`OUS]T bVS : S\ S`OZ 4 aaS[PZg [SSbWUa#
Q\`TS`S\ QSa#`^Saa P`WTWUa Q,R SdS\ba W bVS aW]TWVWZ Z\UcOUSa# WQZ`RWU
PQQYU]c\`R`W]`[\`Ob\`#`^Saa`SZQSa#\`Se a abj`Wsa#R] Qc[S\`ba#`^V] b] U`O`Va Q,R

((/%F][S dVcOZ[SRWQ dS OUS [WvPS ^]dVSR Pg aSZQSR [SRW^]]Za]e WU
bj Z UWbQa Q R a^OOS Q \ aVRS ObW \ a%GVS ^]]Za OS `SaS`dSR Sf QZaWVSZg T]` H\ VSR
AObW \ a GSZdW \ # H\ VSR AObW \ a ^V] bj U O^VS`a# WbS \ ObW \ OZe WS aS`dW Sa Q R
^V] bj OUS \ QSa%< bVS QaS]T ^`Wb [SRW# bVS H\ VSR AObW \ a 6]``Sa^] \ RS \ ta
4 aa] QObW \ [Qg PS QYSR bj ^] dVRS] \ S]` aSdS`OZ`S^`SaS \ bObW Sa%

((0%GVS]TIVWZ [SRWQQ] [^O gWU O; SCR]T FbOS]` :]dS \ [S \ b]` VSCR]T
RSZSUObW \ # WQZ RWU bVS]TIVWZ ^V] bj U O^VS`#e VZ \] b PS ^S [VSR bj ^ObW QbS
W bVS ^]]Za% @SRWQQ] [^O gWU ; SCRa]T FbOS]` :]dS \ [S \ b e VZ PS CPZS bj
Q dS` bVS QObW Sa]T bVSWRSZSUObW \ W bVS SdS \ b W] ^S \ bj bVS ^`Saa%

()` %B TIVWZ ^V] bj U O^VS`a Q R bSZdW \ Q Se a e VZ VQdS Q]^^] `bc \ Wg bj Q dS
bVS atOS [S \ b]T bVSW ; SCR]T FbOS]` :]dS \ [S \ b]` VSCR]T RSZSUObW \] \ O
`] bObW U P Q W T] [bVS ^`Saa P]] bVa ac``] c \ RWU bVS : S \ S` CZ4 aaS [PZg ; OZZ% B e WU

() - %GVS H\ WSR AOW\ a @SRWQZ FS`dWS e WZ]^S`Os O e OZ\$W QZWW T][
(*' O% %b] , ^% %e SSYRCga T] ` bVS Rc`OW\] T bVS : S\ S` OZ4 aaS[PZ%GVS QZWW W
Z] QbSR W bVS [OW FSQStOW b 5 c WRWU# T bV TZ] ` !bZS^V\ S1) () 0- * . ' / ' "%<
ORRW\ # O aCbZZbS QZWW e WZ PS] ^S\ T][/ %' O% %b] . ^% %e SSYRCga W bVS
A] ` bV ? Oe \ 5 c WRWU# W `]][A? \$

: S\ S` OZ4 aaS[PZg 4 TIOWá

<] \ 5] b O c
GSZS^V] \ S1) () 0- * ' .) ,

FOVW MVQ U
GSZS^V] \ S1) () 0- *) **-

C] b] Q Z

L]] \ LS] QVS] Z
GSZS^V] \ S1) () 0- * . (. ((9 Cf 1) () 0- * (0) (

6] \ TS` S\ QS FS d W Sa

? W O? W c\ MVQ U
GSZS^V] \ S1) () 0- * / ((+

Ec YaVQ\ CS` S` O
GSZS^V] \ S1) () 0- * . * , (

8 \$[O M S[SSha[3 c \ % ` U

< b S ^ ` StObW\ a S` d W Sa

;] aaQ 9 OV
GSZS^V] \ S1) () 0- * /) * ,

5 VChS` CZ[SSBWUa Q] ` RWObW\

ESaS` dObW\ a l W\ a% \ % ` U

8 \$[O M P V Ch a \$[ac 3 c \ % ` U

FgZl W: c b W ` Sh
GSZS^V] \ S1) () 0- * / * / .

FtObS[S\ bacP[W a W\

^ O` S` a[O b3 c \ % ` U

CO` S` F[O b ^] ` b O Z
^ O` S` a[O b % \ [SSBWUa % ` U

6 ` W b W O 7 W h F Q V c Z h \$? Q US\ R] ` T

8 \$[O M W ^ a 3 c \ % ` U

?] U W b W a Q] ` RWObW\ T] ` [SSBWUa

8 [[OCWQVS
GSZS^V] \ S1) () 0- *) 0 ,)

7 SZSUCbW\ CQQ SRWObW\ O R CQCSaa

J O W G O Y 6 V c O
GSZS^V] \ S1) () 0- * . (/ (9 Cf 1) () 0- * (0) (

9] ` S4 QQ SRWObW\ bSQ\ W Q Z W ac Sa l

< 6 GF ; SZ 7 Sa Y
GSZS^V] \ S1) () 0- * , ' **
8 \$[O M VSZ` SR Sa Y 3 c \ % ` U

FSQ`Wg

7 S^cbg 6 WY#@WCSZ5`]e \ S
GSZ^V] \ S10(. *- . 0)((
8\$[OMP]e \ S)3 c \ %`U

? WcbS\ Q b @OYRO@Q6]`[QY
!FSQ`Wg 8dS\ bCZ\ \ WUH\ W
GSZ^V] \ S1)() 0- * . ')/
8\$[OMP] [QY]`[QY] 3 c \ %`U

@SRW

; cO=W U!C Saa FS`dWS"
GSZ^V] \ S1)() 0- * 0- , *

6] ZWSb9WXO` A XWUO
!@SSbWUa 6] dS` CUS"
GSZ^V] \ S1)() 0- * , / , '

<aCPSZS 5`]gS` !4 QQSRWOW " "
GSZ^V] \ S1)() 0- * -0*+
9Cf1)() 0- * ++)

7 QdWJ]] RW!5`] CRQabQ RH\ WSR
ACW\ a GSZdWV\ "
GSZ^V] \ S1)() 0- * 0*00

=Q WZ @Q6]`R!C Saa 6] \ TS`S\ QSa"
GSZ^V] \ S1)() 0- * . . ' .
8\$[OMP] [QY]`R3 c \ %`U

9QQWNa @Q CUS[S\ bFS`dWS

4 \ R`Se AgS
GSZ^V] \ S1)() 0- * . + , *

5`]CRQabQ R6] \ TS`S\ QS Fc^^]`b
FSQW\

CO`WY @]`W\ \ W
GSZ^V] \ S1)() 0- * ' + ' .

6 O`WZ[QabS` ^ZQ

CSbS` F[WV
GSZ^V] \ S10(. *- . , / , *

J S` \ S` FQM Wb
GSZ^V] \ S10(. *- . , +)'

