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

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









AOK!)J@JD@!)C@HKBRJAGC@!#BKJH!(KI CBAG@Z!J@D!"BJF\_@Z!\$MHAKV!])#("\$^!aOGFO!GH!  
AOK! I BGVJBM! HCEBFK! CQ! @QCBVJAGC@! QCB! @JAGC@JX! BKI CBAG@Z! AC! AOK! 4 1U#! J@D! C@!  
)J@JDJiH! I BCAFKAJ!JBKJ/BKXJAKD!FCVVGA\K@AH!E@DKB!AOK!)O1?!

"OK! ))\*#! ZEGDJ@FK! GDK@AGGKH! \_KM! ABJGAH! J@D! AOBKHOCXDH! CQ! KQKFAGRK@KHH! AOJA!  
FC@HKBRJAGC@! JBKJH! J@D! VKFOJ@GHVH! HOCEXD! OJRK7! @! AOK! )J@JD@!) FC@AK`A7! AC!  
JFOGKRK! AOK! @/HGAE! FC@HKBRJAGC@! CQ! SGCDGRKBHGAM! JDKQ@KD! JH! hAOK! FC@HKBRJAGC@! CQ!  
KFCHMHAKVH! J@D! @JAEBJX! OJSGAJAH! J@D! AOK! VJG@AK@J@FK! J@D! BKFCRKBM! CQ! RGJSXK!  
I CI EXJAGC@H! CQ! HI KFGKH! @! AOKGB! @JAEBJX! HEBBCE@D@ZHH^?! "OK! ZEGDJ@FK! I BGVJBGX!  
JDDBKHHKH! I CAK@AGJX!KQKFAGRK@KHH!CQ!ACCX7!SJHKD!C@!AOKGB!ABJGAH7!BJAOKB!AOJ@!BKJXGKD!  
KQKFAGRK@KHH!iC@!AOK!ZBCE@Di?!



! : DD><@A\*G<6C; =>=P\*\*

- (KFCZ@gf@Z! AOKHK! JBKJH! JH! J@! ' \* ) 2! aJH! FC@HGDKBKD! J@! GVI CBAJ@A! HAKI ! AC! K@HEBK! AOJA! AOKM! JBK! BGZOAQEXM! G@FXEDKD! G@! @JAGC@JX! BK! CBAH! J@d! XGHAKD! G@! AOK! 4 1U#?!!
- -A! aCEXD! SK! DKHGBJSXK! AC! BKFCZ@gk! AOKV! JH! ' \* ) 2H! AC! BJGHK! AOKGB! I BCQGXK! J@d! AOKBKSM! XKHHK@! AOK! BGH\_H! AC! AOKGB! KFCXCZGF JX! J@d! FEXAEBJX! G@AKZBGAM7! J@d! XC@Z/ AKBV!HKFEBGAM?!
- -A!aJH!JH\_KD!aOKAOKB!BKFCZ@gAGC@!CQ!HEFO!J@!JBKJ!JH!J@! ' \* ) 2!V6ZOA!OKXI !GA!AC! ABJ@HGAGC@! AC! SKFCV@Z! J! IBCAKFAKD! JBKJ! E@DKB! AOK! BGZOA\JI IBCI BGJAK! FC@DGAGC@Hj ! -A! aJH! QKXA! AOJA! AOGH! JI I BCJFO! aCEXD! SK! EHKQEX! G@! ) CXCVS6J7! QCB!



"OK!QCXCaf@Z!AaC!\_@DH!CQ!JBKJH!DC!@CA!VKKA!AOK!DKQ@GAGC@!CQ!J!!BCAKFAKD!JBKJ?!"OK!  
QGBHA! ZBCEI! GH! DKHFBSKD! JH! SK@Z! FC@HKBRKD! AOBCEZO! HKFC@DJBM! RCXE@AJBM!  
FC@HKBRJAGC@?!G?K?!FC@HKBRJAGC@!CEAFVVKH!JBK!



. : ; 9\*7G<=A\*: E\*59>58!\$ESdKFA!AC!VCBK!@!DKI AO!FC@HGDKBJAGC@7!AOK! I JBAGFGI J@AH8!!

- !ACaJBDH!BKFCZ@Gf@Z!JH!' \*) 2H!JBKJH!AOJA!KHHK@AGJXM!VKKA!AOK!\_KM!  
KXKVK@AH! CQ! AOK! -3)+! I BCAFKAD! JBKJ! DKQ@GAGC@7! K`FKI A! QCB! CQGFJX!  
BKFCZ@GAGC@7! SKFJEHK! AOK! BKXKRJ@A! ZCRKB@VK@A! JZK@FM! DCKH! @CA! aJ@A! AC!  
BKFCZ@GK!GA!JH!J! I BCAFKAD!JBKJ?!"OGH!aJH!FC@HGDKBKD!GVI CBAJ@A!JH!J!VKJ@H!AC!  
K@HEBK!AOK!JBKJH!JBK!BKFCZ@GKDJ@D!AC! I BCVCaK!AOKGB!HKFEBGAM7!J@D!HOCEXD!SK!  
DC@K!JH! I JBA!CQ!J!SBCJDKB! I EHO!AC!K@FCEBJZK!ZCRKB@VK@AH!AC!BKFCZ@GK!JBKJH!  
AOJA!VKKA!AOK! I BCAFKAD!JBKJ!DKQ@GAGC@!JH! I BCAFKAD!JBKJH!J`FKI A!aOKBK!AOK!  
ZCRKB@J@FK!JEAOCBGAM!BKdKFAH!AOK!XJSKX?!!
- !ACaJBDH!G@FXEDG@Z!JH!' \*) 2H!JBKJH!AOJA!VKKA!JX!KXKVK@AH!CQ!AOK!  
I BCAFKAD! JBKJ! DKQ@GAGC@7! K`FKI A! QCB! CQGFJX! BKFCZ@GAGC@7! SKFJEHK! AOK!  
ZCRKB@J@FK!JEAOCBGAM! I BKQKBH!AOK!JBKJ!@CA!AC!SK!BKFCZ@GKDJ!JH!J! I BCAFKAD!  
JBKJ?!"OGH!aJH!FC@HGDKBKD!GVI CBAJ@A!AC! I BCRGDK!BKFCZ@GAGC@!J@D!HEI I CBA!QCB!  
AOK!JBKJ7!SEA!aCEXD!HAGX!BKbEGBK!FC@HK@A!CQ!XJ@DCa@KBH?!!
- JSCEA! JBKJH! DKHFBGSKD! JH!  
DKXGRKB@Z8! J^! HKFC@DJBM! RCXE@AJBM! FC@HKBRJAGC@7! J@D! S^! J@FGWJBM!  
FC@HKBRJAGC@?!

&<6: DJ5@M< \* 56@I G@>AP\* "OK! ZBCE I ! DGHFEHHD! aOKAOKB! GA! aCEXD! SK! EHKQEX! AC! XGHA!  
HI KFGGF! AMI KH! CQ! JFAGRGAGKH! AOJA! JBK! FC@HGDKBKD! G@FCVI JAGSXK! aGAO! ' \*) 2H7! -@! AOGH!  
FC@AK`A7! AOK! ZBCE I ! BKVJG@KD!H\_KI AGFJX! JSCEA! AOK! FC@HKBRJAGC@! RJXEK! CQ! J!BJ@ZK! CQ!  
J@C@/K`OJEHAGRK!J@D!@C@/K`FXEHGRK"!JBKJH!HESdKFA!AC!G@DEHABGJX!EHKH!G@FXEDG@Z8!!

- &CBKHABM7!G@FXEDG@Z!FKBAGGKD!QCBKHAHm!
- \*`ABJFAGRK!FC@FKHHGC@Hm!
- "KV I CBJBM!QGHOKBM!FXCHEBKHm!J@D!
- \*`FXEHGC@! gC@KH! DKDGFJAKD! AC! @JAGC@JX! HKFEBGAM! J@D! CAOKB! \_G@DH! CQ! V@GAJBM!  
JBKJH?!

(G<8G>\*AJ>6G>A8!"OKBK!aJH!J!ZBCaG@Z!FC@HK@HEH!AOJA!HG@ZK!HI KFGKH!VKJHEBKH!AOJA!DC!  
@CA! JDDBKHH! AOK! aGDKB! OJSGAJA! HOCEXD! @CA! SK! FC@HGDKBKD! ' \*) 2H7! AOCEZO! GA! aJH!  
BKFCZ@GKDJ!AOJA!HCVK! I BCAFKAD!JBKJH!HKA!E I !aGAO!J! I BGVJBM!CSdKFAGRK!CQ! I BCAFAG@Z!J!  
HG@ZK!HI KFGKH! EHKQEXM!FC@ABGSEAK!AC!J! aGDKB!HMMAKV!CQ! I BCAFKAD!JBKJH!J@D! ' \*) 2H7!  
I BCRGDKD! AOJA! VJ@JZKVK@A! VKJHEBKH! BKbEGBK! AOJA! AOK! OJSGAJA7! J@D! FC@DGAGC@H! QCB!  
VJ@AK@J@FK!CQ!\_KM!XGK!FMFXK!HAJZKH7!QCB!AOJA!HI KFGKH!GH!VJ@AJG@KD!JG?K?!AOJA!FC@ABCX!  
C@!OJBRKHAG@Z!GH!@CA!AOK!HG@ZK!VJ@JZKVK@A!VKJHEBK^?!

" I>9C5JJG<8\*59>5A\*5<=\*MG: =G I >9AG@N\*: EEA>@A8!"OK!ZBCE I !JZBKD!GA!aCEXD!SK!EHKQEX!AC!  
FXJBGOM! AOK! BKXJAGC@HOGI ! SKAaKK@! -O#H7! %O#H7! \*O\$#H! J@D! #k\*H7! G@FXEDG@Z! JHHKHHG@Z!  
AOKGB!CRKBXJ! !aGAO!-) )#H7!HESdKFA!AC!QEBaOKB!DGHFEHHC@H!JSCEA!AOK! I ESXG!DGHFXCHEBK!CQ!  
FCVVE@GAM!XJ@DH7!aJAKBH!J@D!BKHCBEFKH? !-A!aJH!HEZZKHAKD!AOJA!VCBK!AOCEZO!HOCEXD!  
SK!ZGRK@!AC!OCa!SGCDGRKBHGAM!CQHKAH!VGZO!SK!QGZEBKD!G@AC!AOK!KVKBZi@Z!QBjVkaCB\_?!

BKXJAK! AC! "JBZKA! T?L!' AOKBH7! HEFO! JH! AKVI CBJBM! QGHOG@Z! FXCHEBKH7! VGZOA! SKHA! SK!  
G@FXEDKD!E@DKB!"JBZKA!>?^!

N?! \* & \* ) " - . \* + \* \$ \$ !

N?=! 2#+#6\*2\*+"!#+1\ ' (!)' +\$\*(. #"-'+!\*&&\*)"- . \*+\*\$ \$!

"JBZKA! ==! HI KFGGFJMM! VK@AGC@H! KQKFAGRK! J@D! KbEGAJSXK! VJ@JZKVK@A?! 2J@JZKVK@A!  
KQKFAGRK@KHH! KRJXEJAGC@! QCB! I BCAFAD! JBKJH! GH! DKQG@KD! SM! , CF\_@ZH! KA! JX?^! JH! nAOK!  
JHHKHHVK@A!CQ!OCa!aKX! I BCAFAD! JBKJH! JBK!SK@Z!VJ@JZKD!f! I BG^VJBGMM!AOK!K`AK@A!AC!  
aOGFO! VJ@JZKVK@A! GH! I BCAFAG@Z! RJXEKH! J@D! JFOGKR@Z! ZCJXH! J@D! CSdKFAGRKH?o! "OK!  
AKBV! eVJ@JZKVK@A! KQKFAGRK@KHHc! K@FCVI JHHKH! AOBKK! FCBK! JBKJH! CQ! QCFEH! G@!  
I BCAFAD! JBKJ!VJ@JZKVK@A8!

- 1 KHGZ@!GHHEKH!BKXJAG@Z!AC!SCAO!@DGR@DEJX!HGAKH!J@D! I BCAFAD!JBKJ!HMHAKVHm!
- #DKbEJFM!J@D!JI I BCI BGJAK@KHH!CQ!VJ@JZKVK@A!HMHAKVH!J@D! I BCFKHHKHM!J@D!
- 1



JSCRK7! HAJAKVK@AH! CQ! FCVI XGJ@FK! aKBK! VK@AGC@KD! @! AOGH! FC@AK`A! JH! SK@Z! CQ!  
I CAK@AGJX!EHK?!

T?! 6' . \* (+#+) \*!q! " , \* (!(\*5\* . #+"!U(-+)-U5\*\$!

' \*) 2H! HOCEXD! KVSBJFK! J! aGDK! RJBGKAM! CQ! ZCRKB@J@FK! AMI KH7! J@D! HOCEXD! SK!  
DKHFBGJSXK! J@D! JFFKI AKD! SM! AOK! BKXKRJ@A! FCVVE@GAM?! "OK! VKAOCDCXCZM! HKA! CEA! @!  
UJBA! --! CQ! -3) +cH! aJH! I BC! CHKD! JH! J!  
EHKQEX! VKAOCDCXCZM! QCB! JI I XMG@Z! AC! ' \*) 2H?!!

' @! CAOKB! I BCAFAD! JBJJ/BKJAKD! I BG@FGI XKH7! J@D! aGAO! BKQKBK@FK! AC! AOK! HKFAGC@! JSCRK!  
C@! @FCVI JAGSXK! JFAGRGAGKH7! C@K! I JBAGFGI J@A! HEZZKHAKD! AOK! HKFC@D! I BCAFAD! JBJJ!  
I BG@FGI XK! GH! BKXKRJ@A7! @JVXKM8!

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W?! , -\* (# () , -\*\$! #+ 1!"\* (2-+' 5' 6:!

W?=! , -\* (# () , -\*\$! &!)' +\$\* ( #"- ' +!

"OK! ZBCEI !DKSJAKD! AOK! @CAGC@! CQ! OGBJBFOM! SKAaKK@! I BCAFAD! JBJJH! J@D! ' \*) 2H?! #A!  
QGBHA! AOKBK! aKBK! HEZZKHAGC@H! AOJA! ' \*) 2H! HOCEXD! SK! FJHA! JH! SK@Z! HKFC@DJBM! AC!  
I BCAFAD! JBJJH7! aGFO! VGZOA! I BCVCAK! JBJJH! JH! BG@Z! AC! eZBJDEJAKc! QBCV! ' \*) 2H! AC!  
I BCAFAD! JBJJHAJAEH?! OEA! @! XGZOA! CQ! AOK! QJFA! AOJA! JX! ' \*) 2H! aCEXD! @KFKHHJBGMM! OJRK!  
AC! I BCRGDK! KQKFAGRK! FC@HKBRJAGC@! JHESiKFA! AC! AOK! DGHFEHHG@! JSCRK! JSCEA!  
VJ@JZKVK@A! CB! FC@HKBRJAGC@! KQKFAGRK@KHH'7! AOK! ZBCEI ! FC@RKBZKD! C@! AOK! FC@FKI A!  
AOJA! I BCAFAD! JBJJH! J@D! ' \*) 2H! FCEXD! CFFEI M! AOK! HJVK! BJ@ZK! CQ! FC@HKBRJ

- (KFJW!AOK!

- \$ESVGA!AC!AOK!)O1!\$KFBKAJBGJA!J@!EI DJAK!CQ!CEB!aCB\_!AC!DJAK!G@!AGVK!QCB!GA!AC! SK!G@FXEDKD!G@!J@!G@QCBVJAGC@!DCFEVK@A!JA!\$O\$""#/#; <!]# I BG7!2C@ABKJX7^m!
- , CHA!J!HGDK!KRK@A!JA!\$O\$""#/#; <m!
- #DRJ@FK!CEB!AO!G@\_!G@Z!G@! . G\V!]L<!9E@K!/!N!9EXM^!J@D!JA!AOK!4))!]\$KI AKVSKB7! , JaJGiG^7!SM!AKHAG@Z!KRCXR!G@Z!ZEGDJ@FK!JZJ!G@HA!J!BJ@ZK!CQ!HI KFGGF!FJHK!HAEDGKH! CQ!I CAK@AGJX!' \*)2Hm!
- UBCRGDK! AOK! \$KFBKAJBGJA! J! QEBAOKB! E I DJAK! C@! CEB! I BCZBKHH! ACZKAOKB! aGAO! J! FC@HEXAJAGC@!DBJQA!AC!SK!FGBFEXJAKD!AC!UJBAGKH!QCB!FC@HEXAJAGC@!I BGCBIAC!)' U/=L! ]1KFKVSKB7!)J@FE@^m!
- , CHA!J!HGDK!KRK@A!JA!AOK!)' U!AC!EI DJAK! I JBAGKH!J@D!CAOKB!G@AKBKHAKD!ZBCEI HI JSCEA!CEB!aCB\_!J@D!BKXJAKD!4))!CEAFVCVKHm!
- , CHA!J!HGDK!KRK@A!JA!AOK!(J



#++\*[-8

